

JFQ

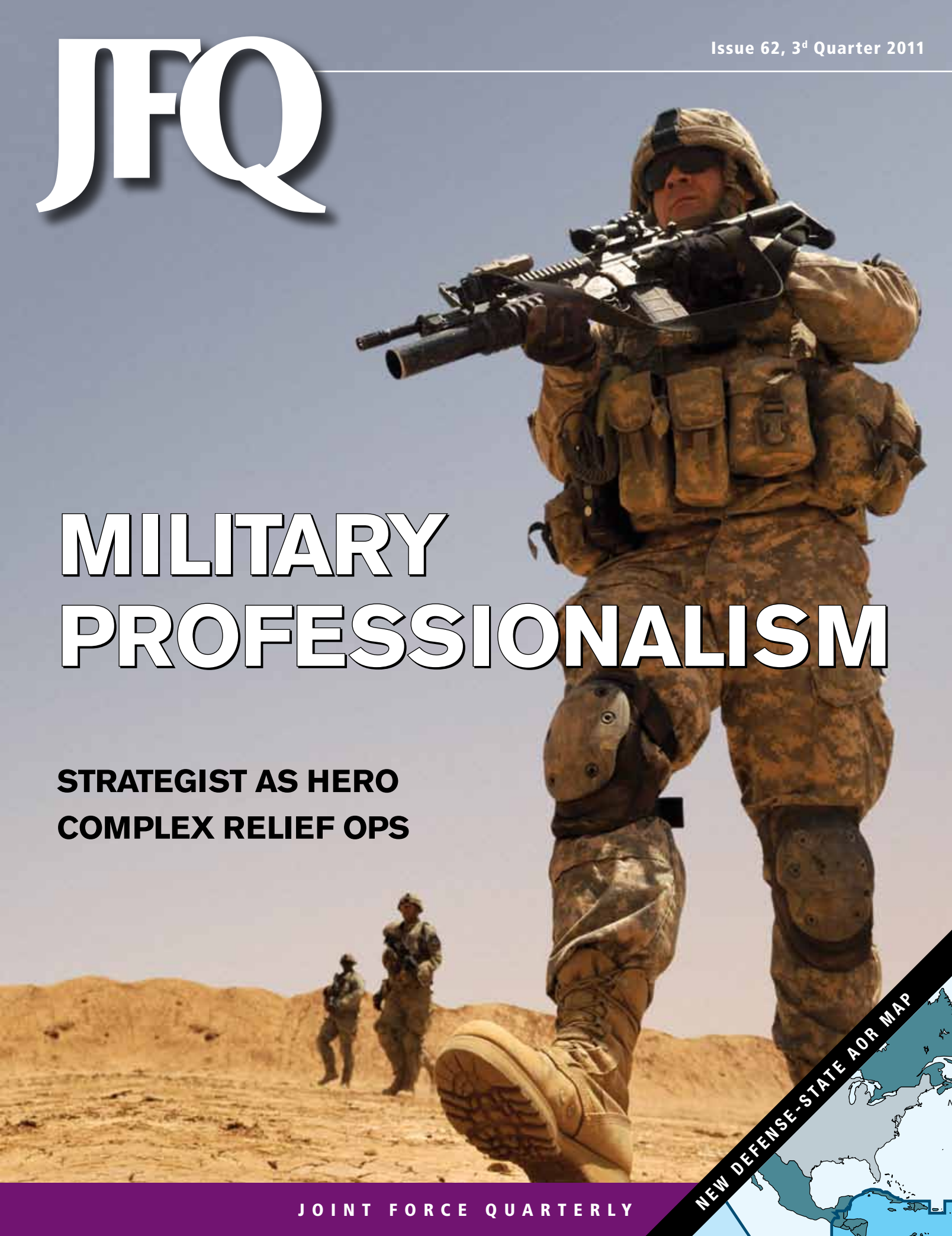
Issue 62, 3^d Quarter 2011

MILITARY PROFESSIONALISM

**STRATEGIST AS HERO
COMPLEX RELIEF OPS**

JOINT FORCE QUARTERLY

NEW DEFENSE-STATE AOR MAP



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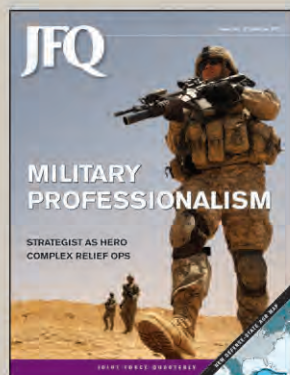
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From the Chairman

I recently spoke at the graduation for the West Point Class of 2011, and while my remarks were mostly directed to the next generation of Army leadership, there is a broader message for all of us. What follows is the crux of those remarks:

Over the last 4 years, one of the greatest privileges of this position has been getting to know the men and women of the United States Army. Days like today remind us why our Army has played such a singular and essential role in our nation's history. In many ways, the story of the United States Army is the story of America—from our founding through the Civil War, a tumultuous 20th century, and right up until today.

I was thinking about a figure so prominent in that story, someone with whom I can in many ways relate: George Armstrong Custer. His story as a Cadet isn't too far from my own as a Midshipman, and, no, Custer and I did not know each other personally. I went to school in the '60s, but not the 1860s.

Just as my performance at that "other" Academy was, shall we say, less than ideal, Custer's record at West Point left something to be desired as well. A review of conduct records at the time—and they do keep track of those things—suggests he had marginal study habits and a proclivity for petty offenses, scoring demerits for "being late

to formation," "hair out of regs," and my personal favorite, "throwing snowballs," for which he logged three demerits.

I have to admit, I beat Custer in this department, having racked up 115 demerits in a single day during my last year. What happened back then remains highly classified, but let's just say that my offense was a little bit more serious than throwing snowballs. So, yes, I have "walked the Area" a few times. There were times when I owned the Area. I could have built condos.

Custer graduated last in his class, known as "the goat," which I note is the same name as Navy's mascot. I also finished near the bottom. I just hope our stories end differently.

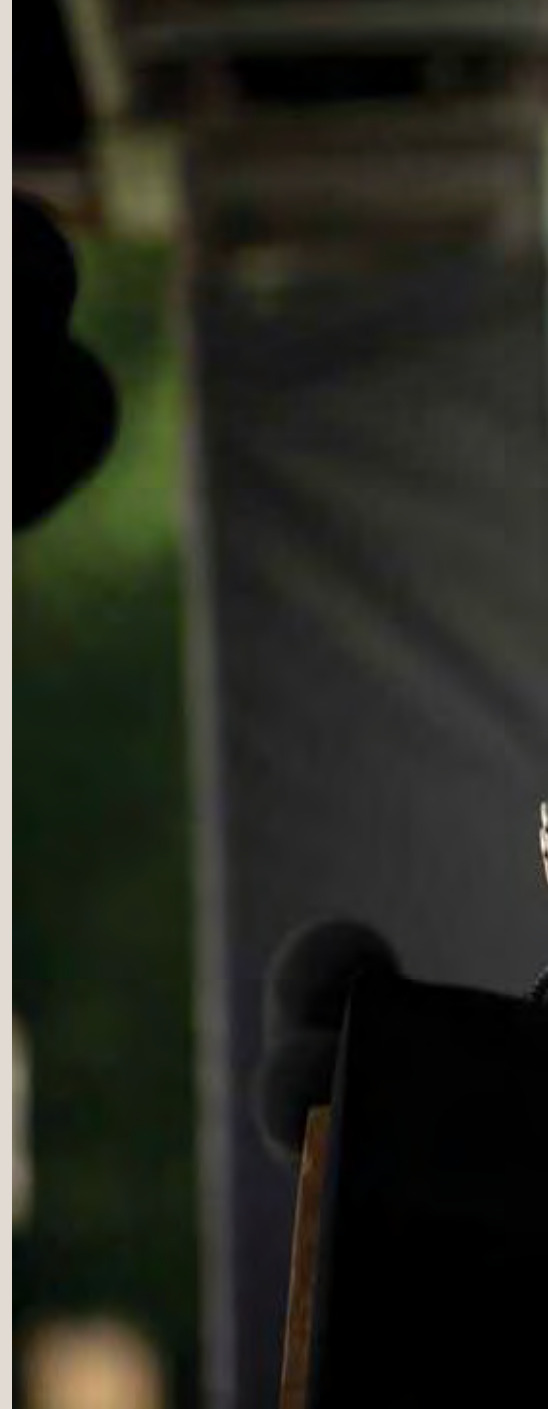
If my record in school said anything, it was, "Mullen, you are really going to have to work hard in the Navy"—and I did, and the opportunities this life of service has provided far exceeded anything I ever expected. I've quite simply had the chance to work with some of the best people in the world, gaining friends and mentors who have supported and enriched me.

Indeed, none of us get to where we are on our own. There's always someone

who helped make it happen. So you ought to remember those who got you here: your moms, dads, brothers, sisters, aunts, uncles, grandparents, and other family members.

Families, thank you for raising these fine women and men in small towns and large cities all over this country, indeed, all over the world. You instilled in your kids a desire to serve, a willingness to sacrifice and to suffer—and I'm not just talking about mechanical engineering class.

Four years ago, you drove them through the Stony Lonesome Gate, and you handed them over. You said, "Here, take my child in this time of war, teach them how to lead and





Chairman delivers commencement address at United States Military Academy, May 2011

how to fight, teach them how to be good public stewards and good leaders to good Soldiers.”

It was a brave thing you did, and difficult. But it was probably more difficult driving away. As the parents of two Naval Academy graduates, my wife, Deborah, and I know that feeling all too well—the pride, the fear, the incredible elation of returning home and knowing you won’t have to pick up dirty socks off the bathroom floor anymore or scrape pizza cheese off the inside of the microwave or jump in the family car only to find the gas on “E.”

Today, of course, is really all about the Class of 2011. When this country was attacked on 9/11, most of you were just 11

or 12 years old, getting your braces off and getting yelled at for leaving dirty socks on the bathroom floor.

We have been at war nearly half your young lives. Yet all of you made a choice freely to serve your country, to come here to West Point. Your choice, your commitment, speaks well not only of your character, but also of your courage. For that, I deeply respect and thank each of you.

Today, you become a commissioned officer in the ranks of the most respected military on Earth, the vast majority of you heading into the Army, the very center of gravity of our force.

It’s an Army tempered by 10 years of combat, an expeditionary force that has literally rewritten just about every rule and every scrap of doctrine it follows to adapt to the reality it now faces.

It’s an Army not much bigger than it was on September 11 that is now organized around Brigade Combat Teams instead of divisions, that deploys more modular and more flexible capabilities than ever before, that can kill the enemy swiftly and silently one day and then help build a school or dig a well the next.

It’s an Army that understands the power of ballots as well as bullets and culture as well as conflict, an Army that has surged



Soldiers take cover behind hill while receiving enemy fire near village of Mereget, Logar Province, Afghanistan, May 2011

U.S. Army (Sean P. Casey)

to the fore of our national consciousness, not by being a bulwark but rather by being an agent of change.

It's an Army of flesh and blood, an Army of young men and women like yourselves who signed up willingly to face danger and to risk their lives for something greater than those lives.

Your job is to lead them and lead them well. That is what they expect of you. Actually, it isn't a job at all; it's a duty. For those of you who have no prior service, you are going to be awestruck at the manner in which these young Soldiers do their duty every single day.

A couple of years ago, I visited a unit high atop a hill in the Korengal Valley in Afghanistan. You stand up there and you look at the utter desolation of the place and the spartan conditions these young people are living in and you cannot help but get a little thick in the throat.

I awarded the Silver Star to a young officer at that outpost, Captain Greg Ambrosia, Class of 2005. He earned that medal for actions the year prior when he was a first lieutenant, just 2 years after graduating from West Point.

Leading his Soldiers in a nighttime air assault into enemy territory, Lieutenant Ambrosia established key high ground

observation posts. By morning, they encountered an enemy force that not only outnumbered them, but also surrounded their position, closing into within hand grenade range. Greg fiercely led his Soldiers to safety, placing himself in the line of fire. Under his lead, they repelled the opposing force long enough for support to arrive, denying the enemy key terrain.

When asked what inspired him to lead like that, he looked down at his boots and said simply, "My Soldiers."

I spent more time with the Army in my two terms as Chairman than I have any other Service, and I know what he means.

Those troops had been out there 14 months. They had seen a lot of tough fighting and lost a lot of good Soldiers, good buddies. They knew they were going home soon, but they wanted to point out to me all the places nearby where they could venture because they had learned about the culture and had figured out how to work with the tribal leaders.

When they yelled "hooah" after the ceremony, it wasn't because they were proud of their new medals. It was because they were proud of the difference they knew they were making together as a team. It's that team that has made possible the success we've seen in Iraq, the progress we are now making in

Afghanistan, the support we are providing over the skies of Libya, and the security we ensure around the globe.

You're going to be a member of that team. You're going to be expected to support and to have courage and to lead that team almost from day one, and that is a tall order, hard enough all by itself.

But today I'm going to give you another assignment. I'm going to ask you to take on yet another duty, an obligation far more complex and yet just as important as small-unit leadership. I'm going to ask you to be a Statesman as well as a Soldier. I'm going to ask you to remember that you are citizens first and foremost.

This great republic of ours was founded on simple ideas—simple but enduring. One of these is that the people, through their elected representatives, will, as the Constitution stipulates, raise an army and maintain a navy.

The people will determine the course that the military steers, the skills we perfect, the wars we fight. The people reign supreme. We answer to *them*.

We are therefore—and must remain—a neutral instrument of the state, accountable to our civilian leaders, no matter which political party holds sway.

But we can never forget that we, too, are the people. We, too, are voters and little league coaches and scout leaders and crossing guards—or at least we should be. We, too, have an obligation to preserve the very institutions that preserve us as a fighting force.

As George Washington so eloquently put it, "When we assumed the soldier, we did not lay aside the citizen."

So it is not enough today that we deploy. It is not enough today that we fight. It is not enough today that we serve, unless we serve also the greater cause of American self-government and everything that underpins it.

Self-government is not some sweet dish upon which a people may indulge themselves. It requires work and effort, sacrifice and strain. It may at times leave a bitter taste, and because it does, self-government burdens us equally with obligation, as well as privilege.

Now, please don't misunderstand me. I do not understate the importance of military service, and I am not suggesting that one who serves in uniform has not wholly or without honor rendered the Nation its due. Quite the contrary. I have been to the field hospitals. I have been to Dover. I've seen good men and women laid to rest at

Arlington. I know well the full measure of devotion that so many have paid.

Some of them have come from the Long Gray Line, like First Lieutenants Chris Goeke, Sal Corma, and Robert Collins from the Class of 2008, and most recently, First Lieutenant Daren Hidalgo, Class of 2009.

Daren was hit by shrapnel in early February but declined surgery to his left leg, opting instead for antibiotics and pain meds so he wouldn't be sidelined from his Soldiers. He joked with his dad on the phone about setting off metal detectors. Sixteen days later, Daren was killed by an antitank mine, the 81st graduate in these wars to be added to the somber role in Cullum Hall.

Daren came from a proud military family, his dad a 1981 West Point grad; his oldest brother, Class of 2006, currently serving his fourth tour in Afghanistan; and another brother, a Marine who served twice in Iraq.

Yes, you all understand quite well the sacrifices demanded by military service.

What I am suggesting is that we in uniform do not have the luxury anymore of assuming that our fellow citizens understand it the same way.

Our work is appreciated. Of that, I am certain. There isn't a town or a city I visit where people do not convey to me their great pride in what we do. Even those who do not support the wars support the troops. But I fear they do not know us. I fear they do not comprehend the full weight of the burden we carry or the price we pay when we return from battle. This is important because a people uninformed about what they are asking the military to endure is a people inevitably unable to fully grasp the scope of the responsibilities our Constitution levies upon them.

Were we more representative of the population, were more American families touched by military service, like that of the Hidalgo family, perhaps a more advantageous familiarity would ensue. But we are a small force, rightly volunteers, and less than 1 percent of the population, scattered about the country due to base closings, and frequent and lengthy deployments. We are also fairly insular, speaking our own language of sorts, living within our own unique culture, isolating ourselves either out of fear or from, perhaps, even our own pride.

The American people can therefore be forgiven for not possessing an intimate knowledge of our needs or of our deeds. We haven't exactly made it easy for them. And we have

been a little busy. But that doesn't excuse us from making the effort. That doesn't excuse us from our own constitutional responsibilities as citizens and Soldiers to promote the general welfare, in addition to providing for the common defense. We must help them understand, our fellow citizens, who so desperately want to help us.

The first Chairman of the Joint Chiefs of Staff, General Omar Bradley, once said, "Battles are won by the infantry, the armor, the artillery and air teams, by soldiers living in the rains and huddling in the snow. But wars are won by the great strength of a nation, the soldier and the civilian working together."

It's not enough that you learn your skill and lead your troops. You must also help lead your nation, even as second lieutenants. You must win these wars, yes, by working alongside civilians and with other departments of our government, with international forces, contractors, and non-governmental agencies.

But you also must win them at home by staying in touch with those of your troops who leave the Service; by making sure the families of the fallen are cared for and thought of and supported; by communicating often and much with the American people to the degree you can.

Today's operating environment is a dynamic landscape that grows more interconnected and interdependent every day. Yet we still struggle to make the most basic of connections, the relationships that matter so much. As you go from here, please seek also to go beyond the technical knowledge you've gained and broaden your views. Try to see things through others' eyes and leverage every opportunity to better understand and to be better understood.

Know that our trust and confidence go with you. The American people go with you. We are grateful for who you are and all that you will do for the Army, and shoulder-to-shoulder with your fellow citizens, for the Nation and for the world.

Thank you for your service. May God bless each and every one of you and your families, and may God bless America. **JFQ**

MICHAEL G. MULLEN

Admiral, U.S. Navy
Chairman of the Joint Chiefs of Staff



Chairman arrives at Forward Operating Base Jackson, Afghanistan, April 2011

U.S. Navy (Chad J. McNeeley)

Executive Summary

The keys to success in any operation include intense preparation and a constant “scan of the skies” to be aware of changes in the operating environment. While flying, pilots call this skill “keeping your head on a swivel” in order to keep the craft headed to the target while being ready to react to changes. Clearly, world events are causing all of us to have a robust scan to absorb the changes we are experiencing. Being a professional member of the U.S. military requires all who serve to be prepared to execute the mission when called on, regardless of expectation. Change is a constant, we are told.

As I write this summary, we have been given a clear demonstration of the impact a

well-organized, -trained, and -equipped force can have on the strategic level of war with the killing of Osama bin Laden. Demonstrating the ability to leverage the lessons of past operations, U.S. joint forces have set the standard for military professionalism in execution of their assigned missions worldwide. Every American has the right to be proud of what these men and women have done after nearly 10 years of war.

One of the key issues that Admiral Mike Mullen has highlighted and reinforced during his term as Chairman is military professionalism. As he repeatedly states, leadership is the one characteristic of military service that he cares about most. In this issue, *Joint Force Quarterly* provides several aspects of what

it means to wear the military uniform and lead in today’s joint force. You will have an opportunity to reflect on Admiral Mullen’s thoughts on leadership and military professionalism while reading the views of others on this critical component of continued military success. Not everyone agrees on just what a military professional is, so the discussion of what it means to be a professional in the U.S. military should be renewed from time to time as a measure of where our force is and where it needs to go. *JFQ* is proud to offer just such a jumping-off point.

In the Forum, in addition to the speeches from the Chairman’s January 2011 Conference on Military Professionalism, introduced by Dr. Al Pierce, we present two

U.S. Navy SEAL team conducts direct-action mission training

U.S. Navy (Ashley Myers)



articles on the subject. In the first of the two companion pieces, Colonel Thomas Galvin suggests a “domain-based” model for examining the question of whether the profession of arms is indeed a profession. Next, an experienced and highly successful faculty member from the School of Advanced Air and Spaces Studies, Lieutenant Colonel Ian Bryan, enters the debate on when officers should begin seriously considering and learning how to be successful within the civil-military environment in which all general and flag officers operate (far sooner than most do, in his estimation) by offering some suggestions on how this is best done.

The Special Feature section has five articles that offer a chance to expand “thinking space” in terms of strategy, diplomacy, planning, and theory, as well as intelligence training and education. Professor Colin Gray, who has been an important contributor to *JFQ* over the years, places the label of “hero” on the strategist and explains why becoming a good strategist is both a difficult road for the individual and of ultimate importance to the nation he or she serves. While thinking of strategy, members of the military often have no direct means for gaining an understanding of how the “line officers” of the State Department think or the role a diplomat plays in the areas that he operates in. Written well before he was selected as the second U.S. Special Envoy to Afghanistan and Pakistan, Ambassador Marc Grossman discusses his insights, which will no doubt be validated as he works through the issues of his new position. Next, National War College faculty member Colonel Mark Bucknam, a former member of the Secretary of Defense planning team, helps us get a better understanding of how the combatant commands’ Adaptive Planning efforts have fared under Secretary of Defense Robert Gates. Expanding *JFQ*’s partnerships across the Defense Department’s education institutions, we present Professors Rebecca Frerichs and Stephen Di Rienzo of the National Intelligence University, who advocate a path to better organizing how our intelligence professionals learn how to support national security.

The Commentary section has three distinct, strategically important articles that take us from Afghanistan to Latin America and back to the homeland. Lieutenant General William Caldwell and Captain Nathan Finney provide a timely and in-depth assessment of efforts to organize, train, and field the Afghan security forces that will enable a more stable



Air Force Aeromedical Evacuation and Critical Care Air Transport Team prepares Soldier wounded by IED attack to travel to Walter Reed Army Medical Center

and secure Afghanistan. Martin Andersen then suggests a plan for defeating transnational criminal organizations in Latin America, which have so far adapted and survived many efforts to stop them. Given the state of our military forces after more than 20 years of overseas operations from *Desert Shield/Desert Storm* onward, M. Thomas Davis and Nathaniel Fick suggest that despite the fact that the United States retains the best defense industrial base in the world, the relationship between this base and the government needs to be improved in light of the steady consolidation and specialization of the industries involved. Given the additional \$400 billion reduction in the Defense budget over the next 10-plus years, this relationship will become increasingly important to get right because of the obvious reconstitution needs of all Services.

The Features section offers an important set of articles to remind us of how complex our world is—and the likely need for an agile joint force in the years to come. Rear Admiral Steven Romano provides an excellent case study in complex operations based on his experiences as the U.S. European Command J4 during the Georgia crisis of 2008. Throughout the past few issues, *JFQ* has had a number of articles about China, but none that provided the level of insight that Major Mark Snakenberg does on the critical subject of China’s junior officer and noncommissioned officer education. In an effort to provide ammunition to support a

much neglected area of joint professional military education and nuclear issues, Professor Steven Cimbala discusses the calculus of nuclear arms in today’s complex strategic environment. Colonel Reginald Smith helps us understand the strategic considerations of the Arctic, an area that is now under the responsibility of U.S. Northern Command. With an increasingly costly environment for traditional power generation, Colonel Paul Roege lastly discusses several important options for powering our military operations in the future.

As always, *JFQ* provides four engaging book reviews along with a joint doctrine update. Lieutenant Colonel Robert Holdsworth adds to the doctrine debate with his discussion of securing airspaces around airfields in the joint battlespace.

We continue to receive many high quality submissions to *JFQ* each week to select from for the October edition, and we will showcase the winners of the Secretary of Defense and Chairman of the Joint Chiefs of Staff Essay Competitions as well. Given the continuing turbulence in the Middle East and the likelihood of operating in contested spaces in the future, we need to keep expanding our scan and thinking ahead of our position to remain the best in the world at what we do. **JFQ**

—William T. Eliason
Editor

Chairman's Conference on Military Professionalism

AN OVERVIEW

By ALBERT C. PIERCE

Readers of *Joint Force Quarterly* (JFQ) and others who follow his speeches know that Admiral Mike Mullen has been concerned for the past several years over possible erosion of the professional military ethos. A decade of war, the so-called Revolt of the Generals, active campaigning for Presidential candidates by retired flag officers, and other factors have challenged many of the traditional tenets of military professionalism in the Armed Forces. The Chairman has called for introspection and reflection on the part of the members of the profession and asked that more attention be paid to these issues across the spectrum of professional military education (PME) and training.

Admiral Mullen asked the Institute for National Security Ethics and Leadership (INSEL) at the National Defense University (NDU) to explore these issues, and specifically to convene a conference that would stimulate such introspection and reflection and encourage the PME community to rethink how it approaches such questions.

The conference took place at NDU on January 10, 2011. The Chairman's guidance helped INSEL determine both the kind of speakers and audience for the conference. In the spirit of introspection and reflection, all but one of the speakers were Active-duty or retired military professionals. To respond to the Chairman's appeal to PME, INSEL invited leaders from across the military and education community. Admiral Mullen served as keynote speaker. A former Chairman, General Richard B. Myers, now the Colin Powell Chair of Leadership, Ethics, and Character at INSEL, was also a featured speaker, as was a former Deputy Secretary of Defense, The Honorable John Hamre.

Dr. Albert C. Pierce is Director of the Institute for National Security Ethics and Leadership at the National Defense University.

With able logistical and administrative support from NDU's Center for Strategic Conferencing, INSEL organized a 1-day program of featured speakers and panels. It also commissioned and produced two products on military professionalism and has made them available on its Web site.¹ INSEL is in the process of posting on its Web site a video of all the conference speakers and panels. It is also planning to publish an anthology of readings on military professionalism through NDU Press. Other products and programs are being considered as part of this ongoing INSEL project.

As another way to share the conference deliberations more widely, JFQ graciously offered to publish edited versions of some of the conference presentations. This special section that follows includes edited transcripts of remarks by Vice Admiral Ann E. Rondeau, USN (President of NDU); Colonel Matthew Moten, USA; Sergeant Major Bryan Battaglia, USMC; Admiral Leon Edney, USN (Ret.); and Major General Paul Eaton, USA (Ret.).

As INSEL director, I am pleased that we were able to host the conference and produce materials that can be used across the military education and training community and beyond. I thank the editors of JFQ and the leadership and staff of NDU Press for their active support and assistance. **JFQ**

NOTE

¹ See Richard Swain, "The Obligations of Military Professionalism: Service Unsullied by Partisanship," December 2010, available at <www.ndu.edu/INSEL/docUploaded/obligations%20of%20military%20professionalism.pdf>; and "Military Professionalism: An Annotated Bibliography on the Nature and Ethos of the Military Profession," December 2010, available at <www.ndu.edu/INSEL/docUploaded/MilitaryProfessionalismBibliography.pdf>.



Chairman presents keynote speech at military professionalism conference held January 10, 2011, at National Defense University

IDENTITY

in the Profession of Arms

By ANNE E. RONDEAU

When we think about the nature of our profession and about ourselves as individual members of that profession, there are aspects that surround us as individual military professionals, and there are aspects that are inside us as individual military professionals. The former include *ethos*, *culture*, and *meaning*; the latter center on *identity*. What surrounds us transforms what is in us. Thus, *ethos*, *culture*, and *meaning* give us our identity.

We use the word *ethos* all the time, but it is well to think for a few minutes about the words we throw around. The etymology of *ethos* and *ethic* is interesting because the *e-t-h* in Greek set up the words for *ethos*, *ethic*, and, of course, *ether* and *ethereal*. They all go to a notion of the air around us, of what we breathe, of the atmosphere. As an example, let us take the word *ether*. In the old days, prior to the 17th century, ether was considered to be that space that informed and shaped the galaxy, stars, planets, and gods. It was a frame of reference for all that people believed in. Indeed, that then points us to *ethos*, *ethic*, and the *ethereal* nature of thinking. What is that rarified air around us in our atmosphere that shapes what we believe and the way we believe?

For military professionals, the air that surrounds us and that we breathe is our *culture*, and *culture* drives us to *meaning*. We believe in Service culture—Navy culture, Army culture, and so forth. Though we are all members of the Armed Forces of the United States, there are things that make each of our Services distinctive. The book *The Armed Forces Officer* uses the formulation *E Pluribus Unum* to depict how out of our several Services—and Service cultures—we have become one armed force of the United States. I am a Sailor, and from my earliest years in the Navy, I was imbued with and took onboard the culture of the U.S. Navy; it is the air I breathe—salt air, perhaps.

This culture gives us *meaning*—what it means to be a Sailor, what it means to be a member of the Armed Forces of the United States. For all of us in leadership positions, perhaps

especially for those of us in the business of professional military education and training, this comes down to what and how we teach, and how we learn, and how we transmit to those around us in our profession what we say, what we believe, and ultimately, and perhaps most importantly, *who we are*.

Transmitting belief and culture is fairly basic. How that belief and culture are then understood, interpreted, translated, internalized, and applied—that is, put into practice—can be complicating and complicated. Meaning is essential and significant both personally and culturally. Leaders set the tone for the culture of their organizations. Meaning of the community, no matter how defined, becomes essential for interconnectedness, for bonding, and for understanding. It all has to do with the relationship between the organization and the individual. What does the Navy mean to me? What does it mean for me? Meaning becomes essential as a reference point for integrity in all its parts and in all its definitions. Meaning serves to define authenticity and can be both the inspiration and an aspiration. Understanding *meaning* can also give coherence to our actions.

Leaders matter. And it is our leader, the Chairman of the Joint Chiefs of Staff, Admiral Mike Mullen, who has been asking us to think about what we have become over time. He began his time as Chairman by articulating a set of beliefs. Why is this important? Because cultures are set by leaders and what they believe, and what they instill in us helps mold us. Cultures are about belief. In this all-volunteer military and in this precious democracy, our people will draft or walk or march away from us if our culture and our beliefs are misaligned, misguided, misinterpreted, or misused. If we are not clear about who we are, how can the people we serve understand who we are?

When he became Chairman, Admiral Mullen clearly laid out what he believed in:

I believe in civilian control of the military. . . . I believe in preserving the trust and confidence of the American people. . . . I believe in holding myself accountable and others. . . . I believe obedience to authority is the supreme military virtue underpinning the very credibility with which we exercise command and control. . . . I believe true loyalty to our superiors is best

Vice Admiral Ann E. Rondeau, USN, is President of the National Defense University.

demonstrated by showing the moral courage to offer dissenting views and opinions where and when appropriate. I believe in healthy and transparent relationships with Congress.

His beliefs, our beliefs, any beliefs are important because they drive culture, and culture provides meaning, and meaning guides behavior. As members of the Armed Forces of the United States, our beliefs, our culture, and our meaning are such that we—and the American people we serve—simply assume, even *know*, that we will sacrifice when needed, and ultimately, if necessary, give that “last full measure of devotion” that President Abraham Lincoln invoked at Gettysburg.

Admiral Mullen and his generational peers—I am one of them—were part of the Vietnam generation, a generation that perhaps lost sight of traditional military beliefs, or even came to abandon some of them. Having lost sight of our own beliefs, and maybe adopting some new ones, we were not in a sound position to positively affect the American people’s beliefs about and attitudes toward *their* military. It took us a long while to work our way out of that—and to win back the respect and support of the people we serve.

Ethos, culture, and meaning are matters external to us as individual military members, things that help shape, inform, and provide reference points and touchstones. What I intend to turn to now is that which is inside of us: our *identity*. How does identity influence and inform what is inside of us, how we act and behave, and what we believe? Let me enter this topic with a story.

When I first got assigned to Great Lakes as the commander for Navy training and accessions, training for both enlisted cadre and officer corps outside of the Naval Academy, I had a 22-day turnaround, and the move occurred a month after the events of 9/11. I did not have much time to study about what I needed to do to understand this new mission I was given.

So I pulled out from my library a number of books that I read in the past and that I decided to review, so that I could better understand the context of training, especially as we entered a period of war. I would focus on methodologies, pedagogy, and the science of learning. What was some of the historical context that I could draw upon from books I had read? I had the personal and professional experience of the Vietnam War era in my

Vice Admiral Rondeau speaks at NDU military professionalism conference



National Defense University (Katherine Lewis)

own memory, but what had I read that might be useful?

If we contend that personal accountability is critical to a sense of ethical conduct, then we must also contend that identity—how someone sees himself/herself—is essential to ethical understanding. If we claim that we should own our actions, then our personal identity must be connected with moral responsibility.

It was that notion that struck me as I reread Jonathan Shay’s *Achilles in Vietnam*, Malham Wakin’s *War, Morality and the Military Profession*, and James D. Hunter’s *The Death of Character*, and other books, while in transit to Great Lakes. Identity becomes important—both in how we identify ourselves and how our culture identifies us. Identity is thereby linked to some social connection

if we contend that personal accountability is critical to a sense of ethical conduct, then we must also contend that identity is essential to ethical understanding

Soldiers return fire during combat operations in Kunar Province, Afghanistan



with responsibility. To be defined as a “professional,” in contrast with being an “amateur” or a “nonprofessional,” has implications for meaning, expectations, standards, tolerance, and qualifying criteria. We need to say what we mean and mean what we say as we link words of identity with accountability and responsibility.

For example, there is an ongoing debate about whether noncommissioned officers (NCOs) and other enlisted personnel are members of the military profession, or whether only officers are members of the profession. I find that Samuel Huntington argument from 1958 (that enlisted personnel are not members of the profession) to be a conceit of intellect rather than a wisdom of understanding, and not just an artifact of the time in which he wrote. I find the argument about who is a professional, and who is not, to be an interesting issue about identity, so let me act as provocateur.

There is something wholly undemocratic, I would argue, about denying that entire groups of skilled people are not professionals by some conceit of definition, when, in reality, we fully expect professional conduct from them and become incisively focused

there is something wholly undemocratic about denying that entire groups of skilled people are not professionals by some conceit of definition

on accountability when anyone—whether deemed by some to be a professional or not—embarrasses the institution or otherwise violates basic norms of professional conduct and comportment. Why should any individual feel morally responsible, *professionally* responsible, to an organization if others in that organization define that individual in negative terms: that he or she is “not a professional”? Or, in another example, “nonrated”?

We Sailors talk a lot about things that are important to us, things that have always been important to us as Sailors and as military professionals. But circumstances change, and new circumstances pose new challenges and raise new questions. For example, in the contemporary environment, can we Sailors understand what the moral conflict is in close-order combat, the way that the ground Soldier has to understand it? Do we who do distance-firing truly understand the moral dimensions of close-order weapons and the effects of ordnance and of weapons that come close, even as close as knives? What is the identity of a Sailor in this context? What is a Soldier if we put her to sea? Does environment matter? How are decisions made when we are outside the cultural context, norms, and standards of the professional culture in which we have been trained and educated and that we experience? Is our identity as a Sailor the same as that of the Soldier or Marine, or is it interestingly, even significantly, different?

What is it that brings all of us military professionals together? What are the aggregat-

ing principles and desegregating realities? What is the common identity? We need to understand these matters as leaders, learners, educators, teachers, and trainers because they are central elements and key attributes of the military profession.

We are willing to discuss what we believe, but we are much more conflicted as to what that means—the meaning of that Soldier, Sailor, Marine, Airman, and Coastguardsman on point—because while we can say that it is tactical, today it is also strategic.

We must understand ourselves as *professionals* if we want to further this conversation about professional ethics. It is then that we can better answer Admiral Mullen’s question about what we have become. We talk about being a profession of arms, and we nod our heads that we understand what this means.

Yet I submit this issue in the context of our present age: The “profession of arms” has been encroached upon mightily by the ethics of the contractor on the battlefield, by the information age, and by what command authority is all about. How do we understand what is required in the profession of arms in the context of the health of the force? How do we understand the profession of arms as we train our good people to be effective and lethal warfighters at one turn, and then humanitarian responders at another turn, and strategic communicators at yet another—the same people doing all three functions alternately, sometimes simultaneously? We do so always with an

the moral requirement for the American military member today is exquisitely more demanding than that for my generation

expectation of effects and affects that ensure alignment with and allegiance to the ethics and moral principles of “the culture.” How do we as teachers, trainers, mentors, learners, and leaders ourselves put that across in our schoolhouses, our training environments, our commands?

So, to come back to my story, when I got to Great Lakes, I recognized that all the Services had been doing some interesting work, and the Army was doing some great work, but here I was, in November 2001. And there was confusion in most of our students as to what we—as a military and as a nation—were going into and what we were facing. So at Great Lakes we began to do things like the Sailor’s Creed, which has everything to do with *identity*. The words “I am” become essential: “I am a United States Sailor. I will support and defend the Constitution of the United States.” Note that the “am” (the identity, *who we are*) comes before the “will” (*what we do*). A creed connects self-professing identity and belief with the skill sets required for action. Reflection and introspection precede action—identity comes before reasonable and rational accountability. Professionals profess before they act. This discipline is older than the Spartans.

The moral requirement for the American military member today is exquisitely more demanding than that for my generation. So we talk about the warfighter ethic and the warrior ethos, but I would submit that it is no longer just about being the Spartan with a short sword. It is also not just about being on the bomber or ship that delivers weapons from afar, and thus perhaps not having the sense of what’s right and wrong—and the consequences of each—that the infantryman has. To what extent does distance remove us from our conscience, or challenge it, or make it work differently?

One of the realities that has always informed us in the past has been the level of sacrifice. Blood is the risk, blood is the price, and so blood is our measure and our moderator. Is that true anymore in a cyber age?



National Defense University (Katherine Lewis)

Admiral Mullen emphasizes point at NDU military professionalism conference

What does that mean in the cyber age? How do we define the enemy’s will in the cyber age? How do we attribute cause in the information age and cyberwarfare, so that just retribution is exacted, rather than random acts of revenge being committed? How do we measure “sacrifice” and “violence” in these particularized contexts of warfare outside the short sword and knife? These are important leading questions that we have to ask and that are being asked of us.

Earlier this year, I was exchanging emails with my two nephews, one an ensign in flight training and the other a college graduate and philosophy major. The conversation evolved into a discussion about standards and conduct and about what the American people expect of their public servants and in particular those public servants who wear the Nation’s cloth. It was the philosophy major nephew who made a most interesting declaration: “So much is asked of . . . the military. We need to understand what we ask of them, and they need to understand what we trust. Do we establish intolerances even as we ask for more from the military?”

In his Chairman’s guidance for 2011, Admiral Mullen offers a partial answer:

As we advance these priorities within this guidance, our professionalism must remain beyond reproach. The American people and their political leadership closely scrutinized our conduct and rightly so. Respect for them

and for our oath demands that we continue to remain an apolitical instrument of the state. That means being apolitical in our acts and in our words, whether outside the ward room, on the flight line, within the barracks, or in the halls of the Pentagon. Over nine years of close-quarter combat has changed many aspects of what we do. It must not change who or what we are as a professional disciplined force.

Admiral Mullen has it right. The young folks are beginning to talk about this, and it is important for us as leaders and educators to set off on the mark. Who are we? What and who have we become? What do we do, and why do we do it the way we do? We owe this introspection and reflection to the young ones who wear the same uniforms we do. “Take care of your people” means more than providing them the beans and bullets they need to do their jobs and to accomplish the missions we give them. It also means providing them with an *ethos* and a *culture* and a *meaning* that will clarify for them *who they are*—their *identity*—and therefore *what they should do*—and what they should not do—in the demanding and dangerous assignments we send them on. They belong to the American people, and on behalf of the American people, we, the seniors, officer and NCO, are their custodians. If we do our part in forming them, they will surely do their part—out there where it counts the most. **JFQ**

Who Is a Member of the Military Profession?

By MATTHEW MOTEN

From time to time in the United States, a clearly defined word will find itself dragooned by popular culture to serve the common lexicon. Before long, that proud old word will get bandied about so much that it changes and morphs into something that is at once broader and less than its former self. The term *professional* is such a word. Today, everyone wants to be a professional. All sorts of trades, skilled and unskilled, bill themselves as professional. The sides of many 18 wheelers advertise that their firms are “the professionals.” Gargantuan human beings entertain us at sporting events, insisting that they are professional. The toilet paper dispenser in the latrine near my office proudly declares that it is a “Kimberly-Clark Professional.”



**Naval officer renders salute during
national anthem**

U.S. Marine Corps (Andrea M. Olguin)

We should applaud the efforts of the Armed Forces to commence a debate about the profession of arms. I will argue, however, that the effort is only worthwhile if we manage to establish some rigor in the terms *profession* and *professional*. We must have clear standards about what we mean by those terms. We need to understand what professions are and who professionals are before we try to define the profession of arms. Moreover, to be meaningful and useful, these definitions have to have some measure of historical consistency. We have to understand the history of the military profession if we are to attempt to guide its future. Making policy absent a thorough understanding of history is akin to planting cut flowers, and it will yield a similar result.

Some writers loosely use the term *professional* when describing the Armed Forces, meaning that the Services are a standing force or that its members serve for long periods of time. Such imprecision conflates “professional” with “regular” and a “professional military” with a “standing army.” Those terms are not synonymous, largely because they demand too little of military professionalism.

Over the past half-century, scholars have studied the nature of professions quite rigorously. Thus, we may stand on their shoulders as we attempt to define ourselves. Samuel P. Huntington started the debate with *The Soldier and the State*. His first chapter begins: “The modern officer corps is a professional body, and the modern military officer, a professional man. This is, perhaps, the most fundamental thesis of this book.” For Huntington, the military profession and officer corps are synonymous and exclusive. He then defines professionalism in terms of three attributes—responsibility, corporateness, and expertise—and locates military professionalism within those categories.

Responsibility: military forces are an obedient arm of the state strictly subordinate to civilian authority; professional officers use their expertise only for society’s benefit; and society is the profession’s client.

Corporateness: the profession restricts entrance and controls promotion; complex vocational institutions define an autonomous subculture; and journals, associations,

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DOD (Cherie Cullen)

schools, customs, traditions, uniforms, insignia of rank.

Expertise: attaining professional expertise requires a lengthy period of formal education; and professional knowledge is intellectual and capable of preservation in writing.¹

Sociologist James Burk has derived his own triad. He argues that a *profession* is:

*a relatively high status occupation whose members apply abstract knowledge to solve problems in a particular field of endeavor. . . . My definition identifies three prescriptive factors that, when found together, mark an occupation as a profession. One is mastery of abstract knowledge, which occurs through a system of higher education. Another is control—almost always contested—over jurisdiction within which expert knowledge is applied. Finally is the match between the form of professional knowledge and the prevailing cultural belief or bias about the legitimacy of that form compared to others, which is the source of professional status. We can refer to these simply as expertise, jurisdiction, and legitimacy.*²

Burk’s profession is continuously competing to maintain its elite status in relation to society. His principal contribution is the idea that professions vie for control over a body of expert knowledge. To succeed, that is to continue as professions, they must win that competition for jurisdiction.

My preferred definition is one offered in the 1970s by military historian Allan Millett,

the most salient characteristic of professions has been the accumulation and systematic exploitation of specialized knowledge applied to specialized problems

who argues that professional attributes include the following. The occupation:

- is a full-time and stable job, serving continuing societal needs
- is regarded as a lifelong calling by the practitioners, who identify themselves personally with their job subculture
- is organized to control performance standards and recruitment
- requires formal, theoretical education
- has a service orientation in which loyalty to standards of competence and to clients’ needs is paramount
- is granted a great deal of collective autonomy by the society it serves, presumably because the practitioners have proven their high ethical standards and trustworthiness.

The most salient characteristic of professions has been the accumulation and systematic exploitation of specialized knowledge applied to specialized problems.³

The Huntington, Burk, and Millett definitions have historical consistency, which means that we can compare professions over

U.S. Army officer observes supply airdrop to Forward Operating Base Waza Kwah, Afghanistan



U.S. Air Force (Adrian Cadiz)



U.S. Air Force (Melanie Rodgers)

time. For example, historians can qualitatively measure expertise or autonomy or jurisdictional control from one period to another, and thereby trace professional development through history.

Historians debate when certain occupations became professions, but the late 19th century is generally accepted as the era of professionalization. Physicians formed the American Medical Association, and lawyers the American Bar Association. They aimed to govern professional standards, demanding formal and theoretical schooling beyond a liberal education afforded in the best colleges. Waning were the days when an ambitious young man might apprentice himself to an attorney, read the law, and quickly hang a shingle in front of an office across from the courthouse. Instead, to meet the new standards, he needed to attend law school and pass a bar exam. Associations set up licensing examinations and wrote codes of ethics to guide professional behavior and practice. Academics improved their standards of scholarship, codifying requirements to attain doctorates in various disciplines.

Huntington argues that the military officer corps professionalized in the late 19th century, and that it did so largely because

it was isolated from society. For the last 50 years, historians have been debating those conclusions, and historical consensus is that Huntington was wrong. Historians now generally agree that the Army officer corps began to professionalize as early as the 1820s and that the profession matured over the rest of the century. That maturation proceeded not in isolation from society, but in consonance with broader social trends, the same trends that fostered legal, medical, and academic professionalization. Likewise, the maritime officer corps began to specialize in the 1830s and 1840s and moved ahead of the Army in the 1880s and 1890s.

But by the beginning of the 20th century, the Army, Navy, and Marines were all on a professional par, with general staffs controlling expertise at the strategic and operational levels; separate and distinct professional jurisdictions over land power and sea power expertise; a system of hierarchical education, including war colleges, to instruct officers in those esoteric skills; strict standards of entry and promotion based upon both seniority and merit; Service ethics that valued military subordination to civilian authority; and clearly defined occupational cultures comprising uniforms,

after World War II, global responsibilities required an end to the traditional American bias against standing peacetime armed Services

language, behavior, and traditions that delineated their cultures from each other and the rest of society.

Twice in the 20th century, the American professional military and naval officer corps mobilized the Nation to man, equip, and train formidable forces of civilian-soldiers, -sailors, and -marines. Those armies and armadas won two world wars, and just as quickly demobilized when victory was complete.

After World War II, global responsibilities required an end to the traditional American bias against standing peacetime armed Services. Despite demobilization, the Army and Navy have never again been small forces. The U.S. Air Force gained its independence, grew prodigiously during the Cold War, and rapidly professionalized; it stood on the accomplishments of its parent Service, the U.S. Army, and it



Senior Service and civilian leaders attend Joint Flag Officer Course at Air Force Wargaming Institute, Maxwell Air Force Base



Marine officer briefs Secretary Gates in Afghanistan

DOD (Cherie Cullen)

offered a new expertise: the delivery of nuclear weapons.

Large peacetime forces changed military culture. Enlisted persons could now see a path to viable, long careers, something that had never before been assured. Generous programs for Servicemember health care and retirement added to the attraction of military life. These advances caused the noncommissioned officer (NCO) corps in each Service to grow in size, responsibility, and stature, and NCOs began a long process of professionalization. Within 20 years after World War II, commanders at all levels had senior NCOs assisting them in leading a large, regular enlisted force. NCO training schools began to flourish in every branch of Service. Over time, NCOs have come to manifest several of the professional attributes that Huntington, Burk, and Millett define, but their professionalization is incomplete in the areas of formal and theoretical education, accumulation of specialized expertise, and autonomous jurisdiction over a body of professional knowledge. The NCO corps is professionalizing, but not yet professional.

As the term *professional* has metastasized in society, as more and more groups have claimed professional status, the same

has occurred in the armed Services. Various populations within and near the uniformed military have laid claim to professional status. The goal is laudable, and the fact that so many want to be part of the military profession is a novel and welcome phenomenon. Yet as we attempt to define what the military profession is and what it means to be a military professional, we must be mindful of the choices we make. We can embrace historic definitions or invent new ones to suit today's goals. We can choose between inclusivity and exclusivity, between populism and elitism. We can opt for strict standards of membership or loose ones. Obviously, we can also try to compromise between these poles. Whatever we decide, we must have a clear-eyed understanding that our choices have consequences for the future of the military profession.

Professions are not professions simply because they say they are. Their clients, society as a whole, have to accept their claims and trust the professions with jurisdiction over important areas of human endeavor. If we can define our profession in ways that society will accept and trust, we will remain viable and relevant. Doing so demands defining our professional expertise, contesting

control of it when required, and being clear about who exercises authority and responsibility delegated to us by society. **JFQ**

NOTES

¹ Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge, MA: Belknap Press, 1957), 7–18. These descriptions of responsibility, corporateness, and expertise are my abbreviated versions of Huntington's discussion.

² James Burk, "Expertise, Jurisdiction, and the Legitimacy of the Military Profession," in *The Future of the Army Profession*, ed. Lloyd J. Matthews (Boston: McGraw-Hill Primis Custom Publishing, 2002), 21.

³ Allan R. Millett, *Military Professionalism and Officership in America* (Columbus: The Merghon Center of the Ohio State University, 1977), 2.



Service senior enlisted leaders testify before House subcommittee

U.S. Air Force (Scott M. Ash)

The Enlisted Force *and* Profession of Arms

By BRYAN B. BATTAGLIA

What is it that makes membership in the U.S. profession of arms similar rather than different from other professions? While we all understand the need for professional segregation throughout ranks, specifically between the officer and enlisted corps, this segregation should be driven by virtue of rank structure, placement in professional military education, housing assignments, pay scale, and so forth—not driven by one group labeled professional and the other group labeled something other than professional. What makes us similar is that no matter what our rank, specialty, or discipline, we join, enlist, and enter into the same professional organization as bona fide members to perform specialized functions and missions in supporting something greater than ourselves—we become members of an organization that society believes is nothing short of a collective group of professionals.

There are those few who still argue that the only members in our uniformed profession are between the ranks of ensign and general. I stand with the majority of those who view such thinking as dated. This kind of thinking certainly held a bit more relevance many years ago when our enlisted personnel were less educated and less empowered—and, moreover, during a period when our

no matter what our rank, specialty, or discipline, we join, enlist, and enter into the same professional organization as bona fide member

military was not the all-volunteer force that it is today. I do not mean this statement in a condescending manner, but rather with the greatest respect for our former enlisted Servicemembers who served in times of greater challenge and with the utmost patriotism.

I am confident that the majority of our military leaders will concur that our non-commissioned officer (NCO)/petty officer corps easily fall within the realm of what we recognize today as a professional and authentic member in the profession of arms. To emphasize this point, it seems utterly contradictory for then-Marine Corps Commandant General Charles Krulak to organize, develop, and implement the “strategic corporal” and at the same time consider that same NCO something other than professional or a member of the profession.

My challenge as an enlisted voice will be to articulate to some why the Specialist, Seaman, Private First Class, and Airman are also members of this profession, and thereby should be considered, treated, and held accountable as professionals. These warriors may operate and execute at a different level than that of their senior enlisted and officer corps, but nonetheless, we all play in the same league.

I am not speaking alone as I assert that all Servicemembers are professionals. We hold that a young man or woman who chooses to serve the Nation in this organization matters. Doing so equates a minute percentage of society’s youth who even meet the criteria to become a uniformed member in the first place. However, that alone cannot be the credential. The licensing validates itself when a Servicemember graduates from basic training. Tried and tested, that transformation marks an official commencement and membership in this profession of arms.

Are the police officers who graduate from the police academy and then walk their

first beat as rookie cops professional? Yes. Do they belong to a professional organization? Yes. Perhaps they do not match the experience of a police lieutenant with 25 years of experience on the force, but they are professionals nonetheless. The same analogy applies to an athlete brought onto a professional football team as a rookie quarterback. He does not equal the experience, stature, pay, responsibilities, popularity, or lucrative endorsement opportunities of the veteran quarterback, yet neither is less professional than the other—and both are accredited members in their profession.

I must also mention the position and stance of our Services’ senior enlisted advisors. We are all in agreement as to who are members of our profession. The “we” mentioned here also includes doctrinal publications—Service-owned and -operated. For example, let me make mention of the youngest of our Service branches and use the Air Force’s Professional Development Guide, signed and endorsed by its Chief of Staff. Discussing this topic with the Chief Master Sergeant of the Air Force, it was easy for him to define as written in the development guide that *all* Airmen are professionals, and that point commences the moment one transforms from trainee to Airman. Identical responses from the other Services assert that the instant a trainee, recruit, or candidate surpasses the Service standard set forth by its institution and achieves that coveted title of Soldier, Marine, Sailor, Airman, or Coastguardsman marks the licensing into our profession of arms.

To further support “all-hands membership,” let me promote this in a more non-linear manner. To solely associate *military leader* when we define *members of the military profession* would be quite parochial. To an extent, we are all subordinate to someone, but junior Servicemembers who may not have leadership responsibilities by virtue of their rank or billet should not be a disqualifier to the membership or even question their status as a professional. I completely understand the commitment, hard work, cost, and sacrifice of our commissioned leaders to achieve a college degree (a credential) prior to accession and the subsequent requirement to pursue additional or advanced education while serving. It is partly the reason why we have the most highly educated and effective military officer corps in the world.

U.S. Army (Michael L. Casteel)



Army senior NCO directs Soldiers from landing zone during live-fire exercise near Basra, Iraq

Some may argue that one is either a professional or not. I argue that the all-or-nothing approach may not be our best option. So if we cannot come to grips with the Nation that everyone on the team is a member of the profession, maybe there is some maneuver room to categorize—not necessarily the marksman, sharpshooter, and expert design, but rather the rookie and veteran, the nurse and surgeon, and the policeman and commissioner. All are accredited members of their professions, just at significantly different levels as the junior professional and the senior professional. Surely a second lieutenant would not carry the same substance, experience, intellect, and education in the profession of arms as, for instance, General Martin Dempsey or one of the other four-star generals.

Lastly, while we attempt to clarify the definition of *professional* within our own military departments, we need not forget that we are a member of the North Atlantic Treaty Organization. For the most part, 27 other countries look to us as the lead proponent in many functions and methods of operating across the span of the Alliance. So this position of leadership is another catalyst for us to make sure we get this right. Some nations are currently experiencing a massive upgrade of their enlisted corps. Some are ending conscription, while others have added more enlisted ranks. For example, the army of the Czech Republic considers all members professionals, and they take on that title during the swearing-in portion of accession. I am not endorsing that we stretch it that far for our own folks, but the message I carry to you today is that all of our Servicemembers are bona fide professionals in our profession of arms. **JFQ**

Sergeant Major Bryan B. Battaglia, USMC, is the Command Sergeant Major of U.S. Joint Forces Command.

Keeping Integrity

By LEON A. EDNEY

Admiral Leon A. Edney, USN (Ret.), was Former Supreme Allied Commander Atlantic and Commander in Chief of U.S. Atlantic Command.



Honor guard marches into position at Tomb of the Unknowns, Arlington National Cemetery

The best way to voice disagreement in policy or strategy, for an Active-duty officer, is during the formulation stage before execution. The President of the United States and Secretary of Defense are the two most senior civilians in the military chain of command. One level below that are the Service secretaries.

Officers are expected, most would say required, to support the administration's policies and budgets when testifying before Congress as well as in a dialogue with the public. However, when officers are asked their opinions by a Member of Congress, while testifying before that body, they should give their best professional military judgment. That may or may not agree with the administration's position. In my experience, it is not difficult to get key staffers to have their principal ask the type of questions needed to get a point across.

The perception that senior Active-duty officers have to give up their integrity during this process is nonsense. These occasions normally address budget, military readiness, personnel, or key procurement issues. It is also clear that the press will seek officers out, if they voice an opinion that is counter to the current strategy of the administration. In my experience, all decisions made by the

Secretary of Defense that require a National Security Council or Presidential input have political and monetary considerations.

The National Security Strategy, National Defense Strategy, and National Military Strategy are all thoroughly staffed. Each Service Chief and Combatant Commander has plenty of chances to get their views presented, as well as any disagreements. This is the proper time to influence these policies and strategies. These are broad statements and usually do not generate redline opposition. Disagreements of this nature are more likely to arise during a declining budget environment when officers are losing a procurement program that they believe is essential to them, or during the grand strategy for employment of military forces during periods of conflict, or in the personal accountability held for certain failures.

Once a disagreement is voiced in staffing, and the decision is made by civilian leaders not to address military concerns, an officer's only options are to comply, resign, or retire. Several examples from the more recent past may be helpful.

General Ronald Fogleman chose to resign/retire 1 year before his normal tour as Chief of Staff of the Air Force was completed. General Fogleman took this action

because he had concluded that his advice to the Secretary of Defense and Secretary of the Air Force on key issues that were important to him and to the Air Force was no longer being accepted.

What were these issues? General Fogleman believed that year's Quadrennial Defense Review did not properly represent Air Force requirements for air superiority out into the future. Consequently, the number of F-22s in the budget was inadequate in his judgment. His recommendation to court-martial Lieutenant Kelly Flinn after lying about a relationship was disapproved by the Secretary of the Air Force. Major General Terry Schwalier's promotion was denied as a result of the Khobar Towers incident. These were not light issues. When an officer gets to this position, he will have similar situations, and only he can make the choice.

During the first 4 years of the Iraq War, Secretary Donald Rumsfeld repeatedly stated if the commanders in the field wanted more troops, they could have them. The public assumption was that no senior generals on Active duty, in Iraq or Afghanistan, other than General Eric Shinseki officially stated the need for or requested more forces to stabilize Iraq after Saddam was removed. General Shinseki was literally hung out to dry by Secretary Rumsfeld when



President meets with security advisors in White House Situation Room

White House (Pete Souza)

his replacement was announced 18 months early. The general was transforming the Army well before that word became dramatized by Secretary Rumsfeld. He developed the Stryker Brigade concept of fast, lighter wheeled vehicles and the Future Combat Systems program. He took the embarrassment of the Secretary's disapproval in order to guide these significant changes for the future of the Army. He is a good man.

Major General John Batiste turned down a third star and the opportunity to return to Iraq for the second time because he disagreed with the strategy and under-resourcing for the Iraq War.

Admiral William J. "Fox" Fallon, as commander of U.S. Central Command, privately (as is appropriate) voiced his objections to the President concerning any military solution to the Iranian nuclear program and also to a surge in Iraq. He then shared these thoughts with a reporter traveling with him. He thought it was an off-the-record discussion. The subsequent media coverage of an actual or perceived disagreement between Admiral Fallon and the President led to his resignation/retirement. We can never let our hair down.

General James Amos, Commandant of the Marine Corps, recently testified before the Senate Armed Services Committee and

stated publicly that the repeal of "Don't Ask, Don't Tell" was inappropriate while his Marines were engaged in war. General Amos also testified that if the law was changed, he would salute and that the Marines would execute the law smartly. The Secretary of Defense and Chairman of the Joint Chiefs of Staff had publicly endorsed the repeal before General Amos's testimony. Admiral Mullen publicly rebuked General Amos for stating his opinion before the analysis of a Defense-wide survey on the subject was completed.

Concerning public disagreement with national security issues after leaving the Service, clearly each individual has the freedom to do that. Some officers such as General Wes Clark and Rear Admiral Joe Sestak chose to enter politics directly and run for public office under one political party or the other. I support these endeavors, no matter which party they represent. I do not believe that retired military officers not running for or in public office should call for the resignation of a sitting Secretary of Defense. As career military officers, we have all worked for superiors we liked. We also have worked for those who are opinionated and seemingly arrogant. The so-called revolt of the *retired* generals probably resulted in Mr. Rumsfeld remaining in office 4 to 6 months longer. Although Secretary Rumsfeld had

become a lightning rod, President George W. Bush was not going to accept his resignation at the call of these generals, particularly during a midterm election. It would have been an exceedingly bad precedent. His resignation was accepted immediately after the election.

My concerns on this issue are twofold. These public statements from senior retired military officers, particularly those who served and had commands in Iraq or Afghanistan, add stress to the families and loved ones of those serving in those wars and particularly those who have lost loved ones. These types of actions contribute to the politicization of the military, which has been increasing, in my judgment, since the Goldwater-Nichols Department of Defense Reorganization Act of 1986. This politicization could lead to seeking a litmus test on sensitive political issues when promoting general officers to the ranks of three and four stars.

The military as an institution must remain apolitical. What these examples demonstrate is that there are no two similar issues. As senior military officers, we have to understand the process of military-civilian interaction as well as interaction with the press. There is no time off the record. However, we can maintain our integrity, act within our own personal convictions, and do what is right. **JFQ**

Professional Disagreement and Policy

By PAUL D. EATON

Admiral Mullen and Secretary Gates discuss findings of working group report on "Don't Ask, Don't Tell"

U.S. Navy (Chad J. McNeeley)

This article attempts to answer some important questions regarding the expression of disagreement by Active or retired military officers with policy or strategy. Specific questions include under what circumstances disagreement should be expressed, what principles should govern such expression, whether we should differentiate between Active and retired officers, and what parameters should govern such expression. From my perspective, the real question is whether officers should render influence and what type of influence is appropriate.

While on Active duty, officers are to respond to testimony—as did Chief of Staff of the Army General Eric Shinseki to questions posed by Senator Carl Levin (D-MI) on force structure to prosecute the 2003 invasion of Iraq—truthfully and with no effort to evade. At times, such rendering of straightforward testimony carries a penalty if it is in disagreement with policy established by the Secretary of Defense. In other words, General Shinseki disagreed publicly with the policy of minimal footprint to invade Iraq. He was under oath and performing his duty before the Senate Armed Services Committee (SASC).

Another great example is the drama around “Don’t Ask, Don’t Tell” (DADT). When Chairman of the Joint Chiefs of Staff Admiral Mike Mullen took a principled and elaborated stand before the SASC on his recommendation to repeal the so-called DADT law, he drew fire from conservatives. But he was technically in line with the administration—thus, no disagreement, so no harm, no foul. But when Commandant of the Marine Corps General James Amos expressed reservations about repeal, in fact disagreeing with the administration intent, a number of those on the left considered him eligible for dismissal. General Amos, like General Shinseki, gave his answer in testimony as we should all expect. As they say, disagreement is not dissent (or necessarily grounds for attack).

When the same officer is answering questions posed by the press, it is a different matter. The officer has every right to avoid response in order to avoid challenge to

policy established by the chain of command. Should he choose to answer a controversial question and therefore possibly get out in front of the administration, as did General Stanley McChrystal at a news conference in Great Britain on force structure for Afghanistan, the officer puts himself into the controversy at his personal risk. Outcomes can obviously vary.

Indeed, Active-duty officers owe the best possible advice to their chain of command, to their superior, his superior, his peer group, and to subordinates.

The role of the community of retired officers—generals and admirals in particular—is far more complex. Retired officers can render influence in academia, defense industry, and media, among possible venues.

The academic venue might seem benign. Some retired officers find themselves analyzing public policy outcomes and explaining paths to results. Some take more of a policy assessment approach to the matter. Retired Army Colonel Andrew Bacevich of Boston University takes a fundamental position on the use of military force in his recent *Washington Rules*. The book is largely acclaimed and clearly a challenge to this and previous administrations on the militarization of U.S. foreign policy, the overuse of military force in the prosecution of the Nation’s vital national interests, and the failure to balance other forms of national power.

With respect to influence and the defense commercial sector, things get ethically murkier, although technically within the law.

While I was Chief of Infantry, for instance, I had no end of retired generals come by my office to inform me on acquisition opportunities. These men were friends, former bosses, and had the perception of access to the man responsible for Infantry programs. In fact, fully 80 percent of retired three- and four-star generals and admirals migrate to defense-related industries upon retirement. Even a former Chairman shifted comfortably to a lucrative position on the board of Lockheed Martin, with little reproach. Legal, but this shift can certainly be subject to questions, including real potential for conflict of interest in transition.

The recent observance of the 60th anniversary of President Dwight Eisenhower’s “military-industrial complex” speech conducted at the Cato Institute aimed directly

U.S. Air Force (Jerry Morrison)



General Stanley McChrystal, then ISAF commander, at press conference

at retired general and admiral influence in defense acquisition and the role of money and Congress in how the United States spends money on defense.

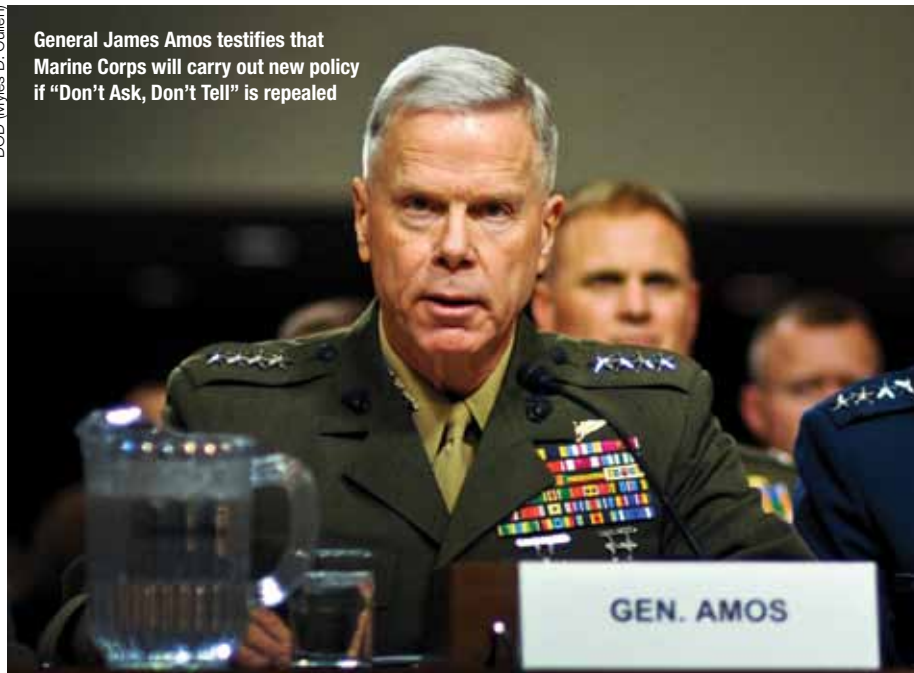
We have seen the role of media pundits become complex, such as when Secretary Donald Rumsfeld gathered a group of retired general and flag officers to manage public opinion through their respective paid and unpaid media outlets. These retired military spokesmen tended to support the Bush administration in general and Secretary Rumsfeld in particular for various reasons. Some simply felt that in so doing they were supporting the troops and their Active-duty colleagues. Some are alleged to have had difficulty separating their business activities and desire for continued Pentagon access from their duty to report objectively.

So from the media influence perspective, we have had a large number of retired senior officers work to influence public opinion, in addition to informing a public largely disconnected from and ignorant of military matters. When the retired general is a cheerleader for the administration, there is a complete absence of drama, unless conflict of interest is found. However, when the retired officer disagrees in the media with policy, the alarms go off.

Active-duty officers owe the best possible advice to their chain of command, to their superior, his superior, his peer group, and to subordinates

Major General Paul D. Eaton, USA (Ret.), was the former Commanding General of the Coalition Military Assistance Training Team in Iraq and former Commanding General of the U.S. Army Infantry Center.

General James Amos testifies that Marine Corps will carry out new policy if "Don't Ask, Don't Tell" is repealed



On March 19, 2006, the *New York Times* published my op-ed, which was critical of Secretary Rumsfeld, shortly after my retirement. In it, I essentially provided the Secretary a 360-degree performance review, declaring him incompetent tactically, operationally, and strategically. That op-ed did not go down well in some circles, notably at West Point and with Professor Don Snider and some Active-duty academics such as Colonel Matthew Moten. Whereas I had been an absolute advocate for the Army and ground Marine force in particular, but the other Services as well, I was now perceived by many as an activist general, a role deemed wholly inappropriate.

Normally I would agree, but March 2006 was a special case, and I would like to explain why I attacked Secretary Rumsfeld, a political appointee, and avoided attacks against our elected officials.

March 2006 was a really bad year for our troops in Iraq and for the Iraqi Security Forces that I had helped to develop. With the February 22 bombing of the al-Askari Mosque in Samarra, the incompetence of the Secretary came to its logical head. Multiple simultaneous and sequential errors in the

prosecution of the war (from insufficient troop strength in the beginning and through 2006), failure to organize for fighting an insurgency that was largely denied, and an unwillingness to fight today's war led to a lack of preparation for what Massoud Barzani promised me would happen in January 2004 while I was on a Kurdish soldier recruiting trip in the north. Secretary Rumsfeld and the generals who passively watched him did not violate every principle of war, but did so with several.

American Soldiers were serving variable length tours in harsh combat conditions of up to 18 months, sometimes exceeding that figure. The Secretary and his Chairman had both stated that we did not need to grow the Army or Marine Corps to meet what was admittedly a heavy demand for ground forces. Furthermore, they had not moved to man, train, or equip the force for the insurgency that they were fighting or to do the concurrent nation-building work required. The Mine Resistant Ambush Protected vehicle was stalled, the force assigned to develop the Iraqi Security Forces was inadequately manned and equipped, and we had not implemented the structure to integrate the diplomatic/political and economic tools to adequately fight the war.

And then I read the 2006 *Quadrennial Defense Review Report*, my trigger point for action. That document continued Cold War acquisitions, did not address the current

fight, and actually called for a reduction of the Army and the ground force Marines.

In March 2006, the press was largely silent, giving Secretary Rumsfeld a bye. Congress went silent. All power was concentrated in the hands of the executive branch, and there, in the hands of three men, the President, Vice President, and Secretary of Defense. The first two were inappropriate targets for a retired general, but the third as an appointee was fair game.

Enter the Revolt of the Generals and the attendant controversy surrounding a handful of men who had read Major (now Brigadier General) H.R. McMaster's *Dereliction of Duty* and chose to not walk past a mistake. In the words of Richard Whalen, we responded to a constitutional crisis. On a personal note, I have to admit a personal component. My father, an Air Force fighter pilot, was killed over Laos, missing in action for 38 years, and is now buried in Arlington. His death occurred January 13, 1969, well after the timeframe that sparked McMaster's book. And I had two sons serving 18-month tours in Iraq and in Afghanistan.

While my assessing Secretary Rumsfeld in the *New York Times* was viewed by many as an inappropriate means of influence, the picture of a lieutenant general (in uniform) on *Fox and Friends* defending the Secretary of Defense from the retired generals was not discussed. Nor was the public affirmation of the Secretary's solid performance by other very senior generals both active and retired, in Pentagon press conferences and other venues.

Finally, let us look at the men behind the so-called surge. Retired General Jack Keane, in concert with Fred Kagan of the American Enterprise Institute, went around the Secretary and Vice President and convinced President George W. Bush to increase Iraq troop strength by 30,000—influence to be sure, but with absolute interest in the welfare of our troops and the mission.

So the question is a bit more complex than simple disagreement. We are really talking about influence across a spectrum and whether it is appropriate for retired officers to disagree. I suspect that if we couple influence with personal gain, ethicists could have a more nuanced opinion than they might have with the deployment of influence where there is not only absence of personal gain, but also potentially disagreement with its consequences. **JFQ**

when the retired office disagrees in the media with policy, the alarms go off

Marine Civil Affairs specialist interacts with Afghan children during medical outreach program in Marjah



U.S. Marine Corps (Shawn P. Coover)

A **New Way** of Understanding (Military) Professionalism

By THOMAS P. GALVIN

Colonel Thomas P. Galvin, USA, is Director of the
Commander's Action Group at U.S. Africa Command.

In a previous edition of *Joint Force Quarterly*, Kevin Bond drew needed attention to the dialogue on the nature of professionalism within the U.S. Armed Forces.¹ In his article “Are We Professionals?” he raised important questions concerning our professional identity and addressed them in a fashion that begins useful dialogue.

This question has interested me since my time as an Army Reserve Officer Training Corps cadet nearly 30 years ago. There, I attended the required briefings and seminars promoting the U.S. military’s status as a profession and answering criticisms by others that it was not. Ever since, the same themes expressed on both sides surfaced in one way or another, but it always seemed that the dialogue was disjointed and never led to a conclusion. Some observations follow.

First, some of the terminology used is ambiguous and needs clarification. For example, terms such as *society* and *the public* are used as though their meanings were assumed to be that of a single collective. Rather, there are multiple societies that are served (or not served) by professionals at global, national, local, and other levels. These relationships need to be well defined as they could impact how one might weigh professional behaviors.

Another ambiguous term is *profession*. It could mean lines of work, such as doctors, lawyers, and nurses. Field Manual (FM) 1, *The Army*, describes the concept more as a field of knowledge, such as “medicine” and “law,” and this description is found under the subject heading of “The American Profession of Arms.”² Unfortunately, the Merriam-Webster Dictionary accepts both interpretations, each of which can potentially lead to different analyses about professionals.

Another challenge concerns how determination of professional status, whether yes/no or to some “degree,” could be affected by cultural choices rather than be a reflection of professional necessity. The successful efforts of nurses to achieve professional status bear this out. Physicians and nurses are both practitioners of the field of medicine, so why was one but not the other professional until now? Was the division of labor professionally necessary, such that the application of knowledge between the two vocations was utterly incompatible, or did it reflect a cultural choice that caused physicians to perform certain tasks and nurses others? Certainly, some nurses

exercise better professional behavior than some physicians. This should be explored in light of presumptions that professional activities tend to be white-collar or intellectual in nature. These characterizations may not be correct, which then sheds new light on vocations that have a heavier physical component, such as the military.

The third challenge concerned the promotion of military professionalism in FM 1, which promotes the profession of arms by describing it as “unlike other professions” such as medicine and law. This can be seen as an unconvincing apples-to-oranges comparison. A stronger argument would include fields whose functions have some overlap with those of the military or that currently perform roles previously belonging to the military. For example, militaries and police forces both exercise lethal force, and the U.S. military historically performed some functions now done by police.

These three challenges stem from a common root—that the approach to defining what is and is not professional has been based on an evaluation of what *is generally considered* professional, as opposed to what *should be*. This article proposes an alternative approach that centers professionalism in the context of fields of knowledge rather than lines of work. From this, we can look systematically at how such fields of knowledge are applied by professionals for the benefit of particular societies and the roles of the communities to which professionals belong. This approach addresses the ambiguities, provides a rational model for determining professionalism in general, and permits an apples-to-apples reevaluation of the fundamental question about the presence and nature of professionalism in the U.S. Armed Forces.

Domains

This approach begins with adding a new term to the lexicon, one borrowed from mathematics. *Domain* refers to a “field of knowledge” along with its purpose, associated sciences (data, analysis, and processes), and arts (application, attributes, and ethics). Domains are global, unitary, and dynamic, fed by the continuous discovery of new knowledge and the refutation or elimination of that which is obsolete or proven wrong.

Domains are defined by their purpose, and a quick review of the lines of work commonly identified as professional suggests that there is a small number of domains that cover

the approach to defining what is and is not professional has been based on an evaluation of what is generally considered professional, as opposed to what should be

most of them. One possible set of definitions follows. The domain of *medicine* is the art and science of healing. Likewise, *law* serves as the art and science of regulating societies, *education* (for example, the work of teachers, professors, librarians) transmits knowledge and experience, *finance* (accountants, actuaries, statisticians) manages and regulates resources, *engineering* (architects, engineers) designs systems, structures, and processes that address a societal need, and *clergy* (leaders and providers of all religions) guides and administers religious beliefs and faith.

Initially, the domain related to the military is referred to as *arms*, defined as the art and science of employing violence to defend a society.

Most domains are aligned against multiple lines of work because each is too broad for individual practitioners to apply effectively. Societies have thus developed divisions of labor (vocations) in which individuals master a portion of the arts and sciences to perform specific applications. These portions will be called *subdomains*, which can overlap within a domain although they represent discrete applications that practitioners cannot readily migrate from one vocation to another. A pharmacist aspiring to become a physician may gain some educational credit for pharmaceutical training, but still must meet all other eligibility requirements of a physician.

Which domains should be considered as having the greatest potential for “professional” application? Domains considered important toward the functioning or stability of societies or the welfare of individuals, and that are complex, specialized, and outside the realm of knowledge ordinarily attained by the average person, ought to be considered suitable. The level of importance can also be measured in the results of misapplication, whether intentional or not. Can unprofessional activities cause indelible harm that should not be ignored? Analyzing domains against these criteria is straightforward. Medicine is unquestionably vital

Soldiers swear oath during reenlistment ceremony in Afghanistan



U.S. Army (Jeanita C. Pisachubbe)

for individual and societal welfare, requires advanced education and training, and causes considerable harm to life and limb when misapplied. Law provides a foundation for stable and peaceful societies, but when misused can be a source of instability and strife. This is not to say that all application of the knowledge is professional in nature, only that vocations that apply the domain should be considered automatically eligible for professionalism.

On the other hand, some domains that have had the “professional” label applied might not satisfy these criteria. Musicians, athletes, and advocates have been traditionally considered as professionals as these domains of knowledge tend to be specialized and their application culturally enhancing, but harm attributed to unprofessional application in these domains is limited compared against medicine and law, and one could argue the extent to which their functions are vital to societies or individuals within them.

Entities

Interfacing with domains are three classes of entities—societies, practitioners,

and collectives of practitioners. These classes have attributes that generally apply to all specific instances of each class and relationships that are consistent among entities.

Societies can be any bodies of people. Those most relevant to this discussion fall into three overlapping categories—the “global commons” that include all people and societies, the “U.S. national” society that includes the citizenry of the United States, and the set of “U.S. state” societies that encompass the citizenries of each state. U.S. citizens therefore belong to an instance of all three. Where the interests of these societies differ can be sources of conflict.

The global commons is a special case of society and is greater than the largest multinational construct such as the European Union or United Nations. The global commons establishes a universal expectation that a domain of knowledge is available to all worldwide, and that what would be considered a professional application of that domain can reasonably be expected to be considered professional elsewhere. World travelers carry such expectations when they get sick away from home and seek foreign medical attention, for example.

Attributes and values held by individual *practitioners* include specialized education, certification, selfless service to others, ethical standards, and others that are above and beyond those of ordinary citizens. Pertinent to this discussion is how, in the abstract, practitioners:

- acquire and sustain the art and science of a domain in ways beyond that of ordinary citizens
- apply the domain in ways that contribute to the continued functioning and stability of societies or the welfare of their individuals, and not in ways that promote one’s self-interests
- show professional and personal character—exercise behaviors and attributes that reflect favorably on the community, avoid those that reflect negatively, and demonstrate moral courage when professional actions can carry good and bad consequences.

Collectives of practitioners form for three purposes. Associations bring practitioners together to further the knowledge of the domain, improve the arts and sciences,



Air Force nurse prepares surgical equipment for operation

and advocate needs and positions to societies. Usually, membership in an association is voluntary. Enterprises are how practitioners organize to provide their services. These can range from individual practices such as clinics to large organizations such as hospitals. Communities are the most formalized, consisting of the regulatory bodies governing the domain within a society, and all constituent practitioners whether actively serving or inactive. The regulatory body, sometimes called a board, determines entry or certification requirements, metes out rewards and punishments, and adjudicates acceptable and unacceptable applications of the domain on behalf of the society. In the United States, communities of practitioners mainly exist at the state level, such as state boards of medical examiners with all licensed medical personnel. Although these are generally headquartered within the structure of a state government, they are still autonomous and are mostly comprised of other practitioners specifically selected to serve in regulatory roles.

Relationships

Relationships among various entities—practitioner to community, practitioner to the community's primary society, and community to its primary society—are constructed differently, so each should be considered separately.

The natures of these relationships are described through the presence of several mechanisms that constitute an agreement or contract between the entities. In the case of community and society, for example, the community ensures the application of the domain or subdomain in exchange for autonomy. The challenge has been to determine what would serve as an acceptable general-purpose checklist that a budding professional community must satisfy without introducing elements that presuppose cultural decisions unrelated to the domain of knowledge or its arts and sciences. For example, the public oath is a common means for a practitioner to express intent to provide faithful service as a member of a community in support of a society, upon which the society confers a

license that certifies the practitioner's ability to serve. Undertaking oaths and licensing are common practices, but not necessarily the only ones.

The relationship between practitioners and their communities has these essential mechanisms:

- establish entry-level requirements—that is, what an individual must master of the domain to be considered worthy of entry into the community and therefore certifiable for service as a practitioner—such as formal education, training, examinations or other means of demonstrating sufficient mastery, and contractual requirements such as oaths that a practitioner promises to the community or society in exchange for membership and ability to practice
- establish sustainment requirements—what the community provides to the practitioner to stay current in the domain—such as publications or other communications
- establish controls over the application of knowledge, such as laws and ethics that

promote or prohibit certain activities, and attributes and values that describe the manner in which practitioners are expected to perform their services, which includes how practitioners are encouraged or required to work together

- create systems of rewards and prestige and ensure that advances in the art and science or faithful service are appropriately recognized
- create systems of censure and dispute, such that practitioners who misuse or misapply knowledge, or whose activities reflect negatively on the community or fellow practitioners, are suitably punished.

The relationships between communities and their societies extend the above for three main purposes:

- establish and sustain a contract between the community and society
- advocate for the profession on behalf of their member practitioners
- manage in autonomous fashion those controls that societies have yielded (for example, the application of censure and discipline by the community that reduces the need for societies to provide direct oversight in professional matters).

Relationships between practitioners and societies become matters of performance. Practitioners apply the knowledge in accordance with the norms and rules of their communities and in satisfaction of societal needs, whether that is the society as a whole or from specific clients. In matters of conflict between professional necessity and societal expectations, practitioners make decisions based on established ethics, challenge those ethics if they are inappropriate or inapplicable, or recuse themselves, even withdrawing from the profession if necessary.

Included in the course of defining these relationships are cultural factors that influence the decisions of practitioners and the expectations of society, but that are not of professional necessity, meaning they are not part of the knowledge, art, and science of the domain. Two relevant to the discussion of military professionalism are offered here.

Practitioner Duration of Service. This is a function of the relationship between communities and their practitioners. Because the domain is vital to society and the entry-level requirements fall above and beyond those of ordinary citizens, expectations may arise that practitioners have signed up to serve for

lengthy periods of time. This is especially true if the society has devoted resources (for example, investment) to training and educating the budding practitioner. Although the choices of practitioners may reflect on their commitment to the profession, the duration of service does not directly bear on the successful application of knowledge. Rather, we expect that applications that put the practitioner personally at risk of physical or emotional harm would see a greater turnover of practitioners. Acceptability of the level of turnover becomes a matter of perception. Regardless, practitioners contemplating departure from the community are expected to perform professionally while still in service.

Global Access to Service. The vital importance of professional domains should mean that all members of society should be served equally and equally well. This is a matter of professional necessity, for any preferential treatment or lack of access has deleterious effects on any or all of the relationships described above. Yet factors unrelated to the domain are ever-present and affect access, such as politics, commercial influences, insufficient numbers of practitioners, practitioner self-interests, and others. How communities and practitioners apportion their services is therefore culturally influenced. For example, medical professionals must deal with the demand for emergency care, increasing costs, malpractice suits, and influence of insurance companies.

This manifests itself in the relationship between societies and their professional communities. Societies' expectations are that communities and practitioners minimize these influences as much as possible, even though the same societies may take actions that induce these complicating factors. Therefore, professionalism of the community means that it is upholding its contract with the society. Professionalism of the practitioner combines measures of performance that demonstrate competency in the domain and of behavior that reflect properly to society on the community.

The above suggests that being a professional is more of a binary (yes/no) proposition than a matter of degrees such as how doctors may be perceived as more innately professional than nurses due to higher entry-level requirements and greater prestige. Either all requirements and conditions are met as expressed in these relationships or they are not. Failing to meet or sustain even one requirement invalidates the contract and renders the

roles of militaries within societies have evolved since Samuel Huntington's seminal work on military professionalism from the 1950s

community or practitioner nonprofessional or unprofessional. Instead, degrees of professionalism are reflective of how strongly the contracts are honored as assessments of the health of relationships among societies, communities, and practitioners. High professionalism sees the proper and fair application of the domain by the community; continually reduced influence of external factors from the society; and the demonstrated and sustained competence, character, and quality of service provided by the practitioners.

The Domain of "Arms"

We should now reexamine what has been referred to as the profession of arms, specifically the American variety discussed in Army FM 1, in a modern context.

The first step is defining the domain. This is actually a complex undertaking for several reasons. The roles of militaries within societies have evolved since Samuel Huntington's seminal work on military professionalism from the 1950s. Some of that evolution resulted in the creation of new communities whose purposes overlapped with their respective militaries, and in some cases assumed, even duplicated, formerly military roles. So in practice the military is one of few (perhaps the only) communities that often exercises roles that fall outside what society (and indeed the military itself) might consider the military's role.

Traditionally, militaries were the societies' guarantors of security and the primary elements of the state that had the authority to wage war and use lethal force. Militaries often addressed both internal and external threats to societies. The Oath of Commissioning in the U.S. Armed Forces still makes reference to "defending the Constitution against all enemies, foreign and domestic."

The American experience, stemming from the days of the Revolution and its culturally imbued distrust of standing armies, led to the growth and development over time of separate institutions to focus on external threats (armed forces) versus internal ones (law enforcement organizations such as police),



Navy chief trial judge addresses law students at moot court competition

U.S. Navy (Anthony Casullo)

each of which independently pursued and achieved professionalization. Each assumed some roles and authorities when it came to the use of lethal force—the military having greater freedom to exercise it in offensive means against external threats whereas the police were largely limited to self-defense.

As law enforcement requirements became more sophisticated and nuanced, new institutions arose. Two are particularly noteworthy. The first is the U.S. Customs and Border Protection, which has responsibility to secure U.S. borders with its neighboring nations, Canada and Mexico. The other is the U.S. Coast Guard, which exercises maritime law enforcement and protects U.S. maritime borders. U.S. law delineates responsibilities between these agencies and the U.S. Army (especially U.S. State National Guards) and Navy; however, there are instances where these agencies cooperate with one another to deal with external threats, with the nature of the threat determining which agency has primary responsibility and therefore who determines the rules of engagement. Collectively, these agencies combine to protect the Nation's geographic territories and manage the use of lethal force.

This historical experience is common among other nations, but manifested differently. The formation of law enforcement institutions as separated from the military

was also found in the United Kingdom. Meanwhile, other European nations created hybrid entities called gendarmeries that are essentially military units performing police duties. Other nations whose security institutions are less robust due to lack of need or limited resources have kept military and law enforcement organizations and missions combined, such as among some African nations whose navies perform both military and coast guard tasks.

The same threats that one nation perceives as external may be perceived by other nations as internal and therefore be handled by different communities within the nation. Countering the threat of violent extremist organizations (VEO) is an excellent example. In the United States, the military has a significant counter-VEO role as it is a threat largely emanating from outside the homeland. Other nations assign this role to its ministries of interior which, due to U.S. law, places restrictions on direct cooperation between the U.S. military and its most direct counterparts in key nations.

As FM 1 declares, “the profession of arms is global.”³ However, it is clear that there is not a direct one-to-one correspondence between any particular military community and the area of uniquely specialized knowledge that it applies in service to its society. That so many disparate communities

exercise overlapping knowledge suggests that the professional domain in question is much broader and more encompassing than the military alone.

This is the professional domain of *security*, which is the art and science of protection against danger, damage, or loss. The profession of *arms*, therefore, describes a subdomain, reflective of a division of labor preferred by American society that separates militaries from other security communities. Using FM 1 as a start point, we can define the subdomain as the art and science of defending the security of a nation or state—its geographic territory, its society and institutions, its people, and its way of life.

The U.S. military is both the community and the enterprise that apply this domain for U.S. society. This is an important distinction from communities associated with medicine and law, whose enterprises are largely independent from the regulatory body. But this is not unique. Other security professions such as police forces, border patrols, and coast guards similarly see the community and enterprise as one and the same, or very extensively overlapped.

The mechanisms employed by the U.S. military to regulate its practitioners are straightforward. For officers, warrant officers, and enlisted, there are entry-level requirements and sustainment requirements—such as professional military education, individual combat skills such as marksmanship, and oaths of service—that vary appropriately depending on the Service and rank. Awards, promotions, fitness reports, the Uniform Code of Military Justice, and other mechanisms govern good and bad conduct or performance.

Some may look upon the Services as different communities, but these reflect divisions of labor, albeit with longstanding historical precedent. The overlap of functions and capabilities among the Services, particularly enablers such as communications and logistics, plus the increase in jointness seen in the force since the Goldwater-Nichols Department of Defense Reorganization Act of 1986, bears this out.

Similarly, the traditional stratification of officers and enlisted (junior and senior) reflects divisions of labor that are much more blended in today's environment than in times past. Senior enlisted are taking on roles and responsibilities once reserved exclusively for officers, and some are now attending officer professional education programs. Taken to

the traditional stratification of officers and enlisted (junior and senior) reflects divisions of labor that are much more blended in today's environment than in times past

an extreme, there is nothing inherent about the profession of arms that would preempt a move to make Officer Candidate School the sole accession means for new officers, essentially causing the military to resemble more closely the rank structure of police forces. This would likely never happen in the United States, but it shows how separating officers from enlisted for the purposes of comparing professionalism is not viable.

Bottom Line

So are the members of the U.S. military professionals?

The bottom line answer is yes. The U.S. military as a community applies the subdomain of arms for its primary society, the United States. It performs a vital function, mastery of the art and science of arms to protect the society in the manner that the society accepts: "defend the Constitution." The military has established the appropriate mechanisms for its practitioners, the Servicemembers, to achieve and sustain professional status, and the practitioners generally sustain the community norms and adhere to societal expectations.

Because the military is an organization, the actions of individual Servicemembers directly affect the actions of others, and in combat this can have significant consequences. This makes military professionalism at all levels vital, as the manner in which individual Servicemembers perform their duties is as important as the results that are achieved. Tactical successes that undermine our societies' confidence risk strategic failure and constitute a violation of the relationship between the U.S. military and American society. This is consistent with the qualifier in the Soldiers' Creed: "No one is more professional than I." It is a personal commitment to the U.S. military community, rather than a collective comparative stance against those of other professions.

On the surface, this countervails Dr. Bond's assertion that "it does a disservice to the very ideals of professionalism . . . to declare

that by virtue of membership in an organization a person is a professional."⁴ However, the two positions are actually quite similar as all professionals are required to adhere to the entry-level and sustainment requirements of the community. Those who do not are subject to censure, such as revocation of their license to practice law or medicine, or less-than-honorable-discharge from the military.

Meanwhile, some concerns about the state of today's military—high turnover rates and erosion of a sense of professional commitment ("calling")—are indicative of unhealthiness among the relationships between the military and its Servicemembers that certainly needs to be addressed, but do not constitute the loss or reduction of professional status.

Although this article presents a different model of professionalism from the traditional views expressed elsewhere, its application is hardly complete, and there is further study to do. Important in today's context is the professional status of civilians and contractors performing functions once done by military members. This article assumes U.S. Servicemembers are volunteers, and conscription in an unknown future scenario might alter the professional status of the force.

Hopefully, the domain-based model offered in this article helps simplify and harmonize the terms and relationships so as to advance the dialogue. After all, the U.S. military's professional identity is important to its mission accomplishment and its longstanding honored relationship with the American people. **JFQ**

The author acknowledges Command Sergeant Major Mark S. Ripka, USA, and Sergeant Major Matthew Grucella, USA, for their contributions to this article.

NOTES

¹ Kevin M. Bond, "Are We Professionals?" *Joint Force Quarterly* 58 (3rd Quarter 2010), 62–68, available at <www.ndu.edu/press/are-we-professionals.html>.

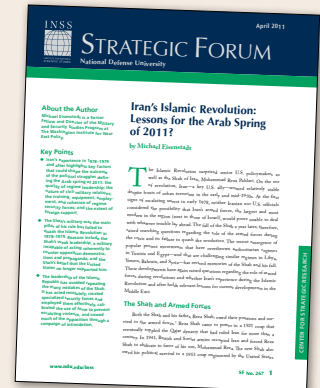
² Field Manual 1, *The Army* (Washington, DC: Headquarters Department of the Army, June 2005), 1–10.

³ Ibid., 1–11.

⁴ Bond, 68.



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Iran's Islamic Revolution: Lessons for the Arab Spring of 2011?

Michael Eisenstadt, Director of the Military and Security Studies Program at the Washington Institute for Near East Policy, examines the Iranian Islamic revolution of 1978–1979 for key factors that could shape the outcome of the political struggles of the Arab spring of 2011. After a close examination of the Iranian revolution, he identifies the following key factors: the quality of the regime leadership; the nature of civil-military relations; the training, equipment, employment, and cohesion of regime security forces; and the extent of foreign support. While pointing out that the leadership of the Islamic republic has avoided repeating the many mistakes of the Shah, it is unclear how the example of the successes to date of the opposition movements in Tunisia and Egypt will influence the staying power of the opposition in other Arab states, or how it will influence the morale and cohesion of the security forces of other embattled regimes.



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Former Chairman General Richard B. Myers speaks at military professionalism conference

Know Yourself Before the Enemy

MILITARY PROFESSIONALISM'S CIVIL FOUNDATION

By IAN BRYAN

General Richard Myers, Chairman of the Joint Chiefs and principal military advisor to President George W. Bush from 2001 to 2005, received a collection of articles on civil-military relations from a long-time friend and professor to help him prepare for the job. In the 20 years between attending the Army War College and becoming Chairman, he had received no formal education to prepare for managing the civil-military relationship, neither at the CAPSTONE course for general officers nor at the Harvard Kennedy School program for senior executives. General Myers shared this

anecdote at a January conference on military professionalism organized by the Institute for National Security Ethics and Leadership at the National Defense University, held at the request of Admiral Mike Mullen, the current Chairman. That conference focused on the profession's connections with civil society.

With grave international and budgetary challenges facing our military, however, some officers might not agree that the profession should focus now on civil-military relations. Yet civil-military relations, starting with its constitutional underpinnings, is at once the most fundamental component of American military professionalism and the one most

overlooked. And it is the arena where our military leaders seem to fail most often, or at least most spectacularly.

This is not a topic just for generals. Officers of every rank routinely make decisions that affect the military's complex relationship with society. Moreover, an officer is far behind if he only begins developing civil-military sensibilities after donning a star. Military leaders need to earn trust and respect while gaining influence with civilian policy elites—politicians, political appointees, lawyers, bureaucrats, and the like—who have been immersed in the domestic political milieu throughout their careers.

Education across the Department of Defense inadequately prepares officers for this arena, giving little attention to the civil-military relationship and its constitutional underpinnings. Even among the select field grade officers whom I taught at the School of Advanced Air and Space Studies with an in-residence military Intermediate Developmental Education under their belts, few have studied or even read the Constitution that they swore to defend since high school or college, even though most are hungry to engage on the topic. We have failed to tend the foundation of American military professionalism.

Neglect of civil-military expertise among officers manifests in views incompatible with our oath, hindering representative government and undermining the societal trust prerequisite to provisioning a strong military. I have heard a well-known retired general officer imply, off the record, that the law is what the President and his administration say it is, notwithstanding the Constitution's contrary assertion. Officers have argued to me in private and in class, and one recently in print, that their personal sense of right and wrong trumps judgments made via our political process and the chain of command.

The profession has permitted a blind spot to form at the center of the officer's duty. This neglect of civil-military competence makes it more difficult for officers to serve effectively, leaving them less perceptive of the Nation's needs and wants. Civil society is of course where resources are provided and where military leaders must look to decipher parameters for sustainable action and to divine unclear objectives.

It will not be enough to bolt civil-military literacy onto an already constructed idea of officer professionalism framed around technical competence. Relations with civil society must undergird the American officer's professional identity. For if civil-military relations are unhealthy, then technical competence is unsustainable or may even work against the Nation's values and interests, particularly as military measures increasingly impinge on the homeland.

A profession's mores will coalesce around its members' sense of purpose, and

the profession will resist anything that detracts from that perceived purpose. In military institutions, this means that only by understanding the domestic context that gives rise to the officer's authority and mission can he understand his role. Those in uniform agree that the military exists to bring force to bear in pursuit of the Nation's interests, but beyond that, consensus frays. An officer's conception of the military's role must begin with understanding society's values and how those values are expressed in the form and philosophy of a government that supplies and legitimates the officer's work. The officer will be a more trusted servant and thus more persuasive if his words and deeds reflect a grounding in, and a broad congruence with, the philosophy of American government and the bedrock American political compact, the Constitution.

Professionalism

Samuel Huntington penned a seminal study of civil-military relations, *The Soldier and the State*, in which he defined professions as possessing *corporateness*, *expertise*, and a *duty to society*.¹ Experts debate a profession's exact components, but Huntington's framework endures and captures the essence of most competing schemes. The framework provides a good vantage point for analyzing the military professional's relationship to civil society. The first of Huntington's three tenets of professionalism, *corporateness*, refers to the degree that military professionals perceive themselves as an institution with a set of values and standards separate from others and designed to promote the institution's purpose. Combat effectiveness demands institutional physical and psychological separateness from society that no other profession matches, transcending vocation to become a way of life. That divide is deeper still as the classically conservative and communal military outlook stands apart from the classically liberal and individualistic American society that it serves.

Corporateness is an avenue to professionalism's second component, *expertise*. Professionalism is sometimes used as a synonym for technical and leadership expertise that puts fire on the target, but the officer requires a broader conception of expertise. The officer's expertise can be divided among the management of three key relationships: relations with entities outside the United States that include training friends and fighting enemies;

DOD (Charlie Cullen)



internal military relations, including issues of command and doctrine; and civil-military relations. Officer professional development focuses on the first two.

Military expertise in managing all these relationships only serves the Nation when geared tightly to the third component of professionalism: duty. It is of little value for officers to absorb a vague duty to country. Officers need a sophisticated and even theoretical sense of duty that helps them answer to what end, by what ways, and with whom duty lies amid an ever-changing context. Democracy shifts much of the moral as well as political autonomy and responsibility from the government, especially the military, and places it on the society for which the military acts. This can only be so if the military is a faithful instrument of the elected leadership. Direction from higher authority, however, is never comprehensive at any level. The officer must constantly assume ideological and material values as he crafts advice and action. Such judgments should sprout from the American political compact that the officer has sworn to defend. It is an institutional failure that the military demands more attention from officers on the proper use of the Internet than it demands they spend on packing this professional foundation.

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while military officers are dedicated to their mission and country, they are susceptible to the same cognitive limitations that groups typically impose on their members

A System of Law

The American political order centers not on geography or person but on a set of ideas about domestic political relationships. External security being secondary, the Founders rejected the protection of the world's most powerful nation, Britain, to pursue a system of diffuse political power that would permit a classically liberal society. Our country's founders sought a government that ruled through law, written and executed by elected representatives. The Founders built our system around a suspicious and realist conception of human nature where ambition would counteract ambition among the political branches of government. The preeminent law is the Constitution, setting forth a Federal Government of limited powers wherein no Federal officer may act without authority tracing back to that document, usually via statute. A standing military is not required by the Constitution and was created by legislation, and thus the Armed Forces are an entirely beholden creation of the political branches without any constitutional grant of independent political power. In fact, fear that a standing army would become untethered from its masters led many Founders to look to the state militias as a check against the regular army, inspiring the Second Amendment's proclamation that a well-regulated militia is necessary to the security of a free state.

Burdened by heavy responsibility and imbued with patriotism, officers want to use power for good. Like others in government, they focus on their technical function, security, and sometimes see law as an obstacle. Military officers find orders especially difficult to swallow when they imperil the men and women under their command without a justification the officer finds convincing. Some have concluded that the officer's duty transcends law, arguing that conscience and perceptions of national security imperatives should instead be the lodestar.

Our constitutional system, however, cannot abide a military that reserves for

itself the final say on anything. Concern for a standing military's political role is reflected in the constitutional debates and the document itself, not fear that political leaders might issue unwise or immoral orders, policy, or legislation. Moreover, safety is not the warrior's mission or even a preeminent military value. Military honor requires facing risk from the enemy, and U.S. Servicemembers swear to accept the risk inherent in serving a government of dispersed powers. Commanders are to care for their troops, but they must also put them at risk, and the commander does not get the final word on when or for what reasons that occurs. Where the question is between civil and military authority, the Constitution's weight falls entirely on the civil side. Officers taunt the public trust to suggest otherwise.

Trust

Without trust, military opinion would fall on deaf ears and society would rightly hobble the force with safeguards and oversight. Our national security apparatus already labors under myriad legislative restrictions and reporting requirements imposed partly because overzealous government officials have sometimes behaved as though they were ignorant of the American system. To navigate this uncertain political terrain, the officer needs grounding in the fundamentals of our government and the tools to conceptualize the military's role in society. The professional officer must work to inspire trust that he will limit his craft to the means and purposes authorized by proper civilian authority—executive, legislative, or judicial.

Trust in the military, although widespread today, is counterintuitive and inorganic to a representative government jealous of its liberty, and so trust needs constant care. The nonmilitia soldier is a danger to society by virtue of his access to and proficiency with weapons and the potential divergence of his interests from those of society, or so the Founders generally agreed. The military's privileged access to information about threats and capabilities, much of which it makes secret, likewise bequeaths power. Military information and the military opinion it stands behind influence national policy and the resources allocated to defense. The chief author of the Constitution, James Madison, began "Federalist No. 41" by acknowledging the danger that so worried his countrymen, warning that with regard to a standing



military, a wise nation will "exert all its prudence in diminishing both the necessity and the danger of resorting to one which may be inauspicious to its liberties."

The fear today is not a coup but, as President Dwight Eisenhower explained in his farewell address, that the military and its vendors will drive policy and become an end rather than a means, shaping the political landscape to their interests. Ignorance and complacency replace nefarious intent as patriotic men and women seek expedience and too conveniently see in their own interests the Nation's as well.



Signing of the Constitution by Howard Chandler Christy

Architect of the Capitol

While military officers are dedicated to their mission and country, they are susceptible to the same cognitive limitations that groups typically impose on their members. The Department of Defense, Services, and every subordinate military tribe see the Nation's interests from institutional perspectives. That each faction thinks it should have more control and a larger share of the budget is as certain as celestial motion. It is silly to think that military officers are not swayed by their institutional interests. Of course, elected leaders pursue institutional and personal advantage, too, but they have a popular and

constitutional mandate and are accountable to the voters.

President Abraham Lincoln defended his actions that arguably violated the Constitution during the Civil War by asking rhetorically, "Are all the laws but one, to go unexecuted, and the government itself to go to pieces, lest that one be violated?" But the President is elected to lead one of the three branches of government with a duty to interpret and preserve the constitutional system, which affords him greater legitimate leeway to act. The idea of Presidential powers expanding in a national emergency is controversial, but the idea of

extra-constitutional powers for officers is not controversial among those with a rudimentary understanding of the system. It is patently illegitimate for an unelected officer to make decisions for the Nation in contravention of his elected civilian masters.

Senior officer resignation would be a way to pressure the President and Congress short of disobedience. This might bring quick satisfaction but at a high price to long-term legitimate military influence. Modern voters respect military opinion, so politicians fear public conflict with officers. If political leaders suspect generals will wield resignation



Members of inaugural class of Joint Special Operations Forces Senior Enlisted Academy pose for graduation photo

USOCCOM Public Affairs (Victoria Meyer)



Service chiefs and Vice Chairman of the Joint Chiefs of Staff testify before Senate Armed Services Committee

U.S. Air Force (Scott M. Ash)

as a political weapon, then administration officials will simply not seek military advice, or they will choose pliant or like-minded uniformed advisors.

Although lawful and far more professionally honorable than disobeying legal orders, resignation nevertheless rests on an incorrect notion of the officer's role. The officer is not a policy advocate but an advisor, helping political leaders make informed choices. Civilian leaders should listen to military advice, but are always free to act contrary. Political leadership is better placed to blend society's diverse values, which is the essence of the politician's craft. Military advice has been rejected sometimes for the better and sometimes for the worse. History does not support the argument that the country would be better off if the military's advice were followed more often. History does suggest that countries placing authority for determining national

interests and how to pursue them in military hands have fared poorly.

Besides, the idea of a single military opinion on any issue is an illusion. Debates rage throughout the military on nearly every issue. For example, although the Department of Defense projected an image of unified military support for General Stanley McChrystal's 2009 call for more troops in Afghanistan, large factions inside the military advocated quite different approaches. Resignation over such issues would confuse the public, devalue military opinion, and rob us of experienced leaders.

Duty to What?

Obedience is important not only for subordinating the military to civilian authority but also for creating combat power. Military effectiveness demands concentrating power at key points in time and space. Orchestrating precise movements, especially with large organizations and in the face of mortal danger, places a premium on obedience. But obedience to what? That the American officer must be a faithful servant of the people through their elected representatives does not close the issue. Under the U.S. Constitution, obedience is only allowed to proper authority and lawful orders. The Congress's and Supreme Court's legislative and judicial authorities may clash with power claimed by the Commander in Chief, presenting the officer with a constitutional dilemma. Officers cannot delegate their constitutional duty to their legal counsel, and international or domestic crisis is hardly the time to start thinking in constitutional terms about professional duty. Officers should expect as much since they take an oath to the Constitution—and to no one else and to no other end.

Policy Responsibility

Much of what constitutes a sound civil-military basis for officer professionalism boils down to deflecting domestic political power and responsibility for policy success and failure that would come with that power. Paradoxically, this is not an abdication but the height of military duty, stemming from the institutional imperative to preserve influence and trust, and the national imperative to leave political authority in the hands of the people and their civil representatives. While an officer may be able to steer policy in the short term by leveraging information and prestige,

political responsibility will damage the military's long-term ability to secure the Nation's interests, potentially triggering a sustained cycle of institutional decline.

Averting policy responsibility can be especially tough when politicians want to turn policy over to generals and draft behind the military's popularity. President George W. Bush, for example, repeatedly asserted during 2007–2008 that he would do just as General David Petraeus advised in Iraq. Influence is good, but public military liability for policy is not. Getting out from under policy delegation and responsibility can be tricky, but officers need the acumen to recognize it, the wisdom to fear it, and the political skills to resist it. Deflecting the Nation's foreign and defense policy authority and responsibility is perhaps ironically the most legitimate purpose for which the officer can employ his domestic political advantages.

The military has ridden a wave of public esteem for decades, throughout controversial action in the Balkans, Afghanistan, Iraq, and Libya. Trust and respect strengthen the military in many ways, from recruitment to the sway accorded to military advice. This reputation and moral authority would not survive if the military acted as a political branch and took greater responsibility for policy.

Individuals and institutions seek power to promote their values and interests. Intellect, however, can provide the basis to restrain and channel this basic drive in order to serve interests beyond the self and institution. The officer corps has either taken this intellect for granted or failed to see its importance, leaving us with inadequate civil-military competence. Society's trust is always at stake, modulating the resources and autonomy delegated to those in uniform. Moreover, the officer needs civil-military expertise to comprehend the Nation's ends, to predict the domestic reaction to his ways and means, and to articulate military risks and opportunities. The civil-military foundation of officership is woefully underprioritized, and at least a more serious treatment in professional military education, starting with the Constitution, is justified. **JFQ**

NOTE

¹ Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge, MA: Belknap Press, 1957).

obedience is important not only for subordinating the military to civilian authority but also for creating combat power



President Obama meets with
Secretary of Defense and Chairman

DOD (Chad J. McNeeley)

The Strategist as Hero

By COLIN S. GRAY

With undergoverned space as its context, the purpose of strategy is to secure control of that turbulent zone. More often than is acknowledged in history books, the political and military battlespace for the strategist is, or certainly approaches, a condition of chaos. The theme of this essay is the struggle by the strategist to devise, sustain, and satisfactorily conclude purposeful behavior. There are grounds for doubt as to whether or not most strategists are heroes. However, the impediments to even adequate, let alone superior, strategic accomplishment are so numerous and so potentially damaging that there is little room for skepticism over the proposition that the strategist's profession is a heroic one.

One can photograph an army but not the strategy by which the strategist seeks to direct it. One can have

paintings of Carl von Clausewitz but not of his theory. Strategy is ethereal. It can be explained and understood, but in common with love, happiness, pain, fear, or security, for example, it cannot be represented directly. Its presence or absence, as well as its quality, can be inferred from behavior as registered in the course of events, but then only if there is a plausible connection between known intention and that record. It is notable that the media, especially the electronic media, do not often try to address strategy. Rare indeed are the books on great (or

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DOD



President Roosevelt and General George C. Marshall watch Major General George S. Patton, Jr., award Congressional Medal of Honor to Brigadier General William H. Wilbur, 1943

poor) strategists, and the television channels that provide vicarious military excitement for armchair warriors almost go out of their way to avoid discussing strategy. When, exceptionally, strategy is the subject, the program more often than not limits its ambition to coverage of operational level effort. One must sympathize. The medium, be it print, film, or PowerPoint, has a way of commanding its subject more than it ought. And of course, one should not forget the client. Publishers can sell books about famous generals or admirals but not about little known strategists (for example, Field Marshal Bernard Montgomery but not Viscount Alanbrooke, or General George Patton but not George Marshall). Strategy is a familiar word and is widely believed to be an important concept, but it is barely comprehended. Indeed, even today, it is little understood that the concept commonly is misidentified and that the word, especially in adjectival form, is misapplied.

Unquestionably, strategy is as important as it is awesomely difficult to do well enough. The title of this essay is not a casual choice. Only rarely are medals for outstanding performance won easily. The subject truly is challenging, and the strategist's role, properly understood, is a heroic one. To be performed well, its multiple demands require extraordinary natural gifts, advantages that need nurturing by education and experience.

That granted, successful strategic conduct should not be so difficult as to evade plausible explanation.

The Purpose of Strategy

De quoi s'agit-il?—"What is it (all) about?" "What is the problem?"—to borrow from Marshal Ferdinand Foch and Bernard Brodie.¹ If the strategist's most potent question is "So what?" Foch's question must be directed at strategy itself. Strategy functions as the only purpose-built bridge connecting political ends with the methods and means for their attempted achievement, most especially the military tools. While the basic function of this metaphorical bridge necessarily is to connect, say, policy and army, the purpose for which this key task is performed is to achieve some degree of control over the polity's security context. Those holding the strategy bridge are charged with the planning and higher orchestration of the policy instruments that in threat and action should impress themselves upon the bodies and minds of those who ought to be concerned by such behavior. The strategist needs to be able to influence enemies, allies, and neutrals, which means influencing minds and actions, foreign and domestic. To bend an enemy's will to resist and, if required, to reduce the capacity of his military means to do harm, the strategist needs to have control over the course of events. For this heroic

task to be feasible, the strategist first must ensure that he controls his own capacity to do the harm he intends. This is the practice of command. Not for nothing is *command* paired with *control* in the standard military formula. So complementary are the two concepts that in effect, command and control are fused as a meta-concept. The purpose of command is to control friendly armed forces so that they can prevail in combat with an enemy whose strategists also are exercising command in search of control (in their case, over us) so as to shape and even dictate the course of strategic history. This is what strategy is all about. This is the answer to Foch's fundamental question. But the strategist as would-be controller of history is ever locked in a struggle against severe odds. The political-bureaucratic policymaking, the military execution, and the political consequences of the strategy process in those distinctive but overlapping phases always threaten to dissolve process into chaos. Preparation for war and war itself and its warfare inherently are hostile environments for good order in strategy. Unfortunately for good predictive order, confusion verging upon chaos approaches the natural condition of war writ large and of its warfare, as well as being a constant menace to the invention, development, and execution of rational and reasonable strategy. The strategist must operate in "bandit country," and that country has both domestic and foreign provinces. The enemy is apt to be the single largest factor among the problems that can frustrate the strategist with his preferred strategy. But a policymaking process at home and among allies that is more than marginally dysfunctional and a military that is something less than tailored and razor-sharp will come a close second.

Strategy and Strategies: Theory and Practice

It would be unwise, though not wholly implausible, to risk an unwelcome historical echo by declaiming for strategy what might read as a severely parsimonious declaration of

the strategist needs to be able to influence enemies, allies and neutrals, which means influencing minds and actions foreign and domestic



General Petraeus successfully overhauled U.S. and Iraq military strategy during implementation of “surge” in 2007

DOD (Charlie Cullen)

faith: “One theory, one theorist, one historical challenge!” Translated, this trinitarian credo would claim that there is only one general theory of strategy; there is only one strategic theorist fully worthy of the job title; and there is only one set of strategic problems, eternally and universally. This extreme example of reductionism happens to be useful because it does highlight two all but axiomatic truths while it exaggerates a justifiable, though arguable, claim. First, there has been, is, and can be only a single general theory of strategy. Different theorists will present this theory in ways that reflect the conditions unique to their historical context as well as their personalities; nonetheless, they must all paint pictures of the same essentially unchanging landscape.

Second, it is not wholly unreasonable to argue that the one general theory of strategy is located and explained well enough by Carl von Clausewitz in *On War*. Although I no longer endorse this judgment, it is appropriate to record a massive note of confidence in Clausewitz’s theorizing. I am prepared to defend the claim that our general theory of strategy is to be found in the works of 10

authors at most. Apart from Clausewitz, a list of the greatest strategic theorists should include Sun Tzu, Thucydides, Niccolo Machiavelli, Antoine Henri de Jomini, Basil Liddell Hart, J.C. Wylie, Edward N. Luttwak, Bernard Brodie, and Thomas C. Schelling.² Each of these authors augments, enriches, and corrects the Prussian sufficiently to warrant a place on the all-time short list of outstanding strategic theorists.

Third, it is reasonable—strictly, it is unavoidable—to argue that one general theory, and potentially even one general theorist, has eternal and universal validity because the fundamentals of strategic challenge do not alter. Each of the theorists identified here speaks to the problems that every practicing strategist has to solve, regardless of his circumstances and historical location. This is less true of Brodie’s writings, but some of his strategic analyses, despite their period-piece Cold War foci and flavor, nonetheless reflect an exceptional awareness of the general theory of strategy.

It is vital to recognize the persisting authority of a single general theory of strategy, no matter that it is presented in various

forms and styles. Such singularity has a fundamental authority over a vastly variable historical domain. This imperium—for that is its nature through the whole course of strategic history—witnesses the creation and execution of specific strategies keyed to command and control in unique contexts. Thus, the realm of general strategic theory is unchanging, while that of the practicing executive strategist is always liable to alter by evolution and even revolution.

There is an inescapable sense in which the apparently clear conceptual distinction between theory and practice may mislead. Although making and executing strategy as a plan for action lie within the realm of practice, every such plan inherently is a theory, paradoxical though this may seem. A strategy expressed in the form of a plan, formal or informal, must be a theory of victory, however defined for its historical context. This strategic plan or strategy, more or less detailed, more or less optimistic, predicts a desirable course of events. In effect, the plan, which is to say the strategy, explains how military, inter alia, success will be made to happen. It will specify,

in whatever detail is appropriate for its level (overall military, operational, tactical), and in more or less discretionary terms, who will do what, with what, in what sequence, where, and when. The strategy may or may not explain why tasks are to be performed. Anchored in time and place, and hence in strategic context, the pragmatic and responsible executive strategist is obliged to practice theory. To plan is to theorize. Theories appear in many guises, but nonetheless the practicable looking military solution to a pressing real-world problem is, in a vital sense, a theory of victory. The practicing strategist must engage in “if . . . then” logic and prediction.

Whereas all strategies are plans, not all plans are strategies. Military action may be guided by a plan, but the plan might simply direct forces to be used in a tactically effective manner, with no careful attempt to relate such intended use to the achievement of goals that have much operational, strategic, or political value. Many of strategic history’s so-called war plans have been nothing of the kind. They can fail the strategy test in several ways. For example, they may be designed with no more discernible ambition than the intention to bring on a “decisive” battle. In the best Napoleonic tradition, one would maneuver in order to fight at an advantage. But this could be in the worst Napoleonic tradition of not having a clear idea how victory would conclude a war satisfactorily; just what would the purportedly decisive battle decide? For another class of example, armed forces can be committed to the fight in the absence of any reasonable expectation that the fight, no matter how well or poorly conducted, will achieve any positive result. An all-too-plain example of this second category of mainly expressive violence would be a large-scale bilateral nuclear war. Nuclear war plans are a practical necessity, but in execution above a modest level of well-calibrated firepower delivered for intended coercive effect, they must require destructive behavior indulged for its own sake. In actuality, the use of nuclear weapons on a large scale would mean only that their owner could think of nothing else to do, even though such action could serve no strategic or political purposes.³

The literature on war planning is voluminous but typically is so concerned to turn over every bureaucratic stone that as a result, the plot at several levels often is lost.⁴ The context for, and consequences of, specific cases of war planning have a way of evading the attention they merit. Furthermore, the

kind of professional expertise that deep knowledge of war planning experience both needs and attracts is not an expertise often inclined to spark creative theorizing by its owner. On the one hand, historical war planning experience is reasonably well understood by historians, but they tend to be professionally allergic to bold theorizing, including that with a strategic focus. On the other hand, our contemporary war planners, competent and even occasionally creative as they may be, are inhibited from contributing to the theory of strategy with respect to the role of planning by both the need for official secrecy and their own lack of professional proficiency in such theorizing. The predictable result of the situation just described is a strategic studies literature that is weak in its general understanding of the roles and significance of what generically has been known as war planning, though today often is called defense planning. Plans, formal and informal, explicit and implicit, are of crucial significance for the translation of politically guided, strategically educated intention into military achievement.

The Value of Strategic Theory

For many defense professionals, military and civilian, theory is a word and concept more likely to induce hostility, certainly indifference, than respect. Pragmatic strategists, their staffs, other advisors, and their executive agents in the military field can have no small difficulty grasping the connection between, say, most of Clausewitz’s philosophizing about the nature of war and solutions to their own contemporary problems.

Officials usually are not interested in the nature of strategy. Instead, for example, they need to know how best to bring down Hitler’s Third Reich. Strategic philosophy can seem more useful for alleviating insomnia or supporting a damaged table leg than as a source of useful advice. The practical strategist, locked into a contextually unique challenge, will look in vain to the classics of strategic theory in his search for usable specific answers to particular problems. In 1944, Dwight D. Eisenhower and his master commanders on the Combined Chiefs of Staff committee needed to decide how to win the war in the West in the context of the war(s) as a whole, European and Asia-Pacific. They could have found few usable particular answers in the pages of Sun Tzu, Thucydides, or Clausewitz.

The general theory of strategy, however it is presented—mingled in a historical nar-

rative (Thucydides), all but PowerPointed cryptically (Sun Tzu), or more than a little entangled in a challenging philosophical exposition (Clausewitz)—can only educate; it cannot instruct with specific advice for today. The general theory explains the nature of strategy everywhere, for all times and for all conditions. What it can do is to educate practicing executive strategists so that they are mentally adequately equipped to tackle their historically unique problems. In short, the practicing strategist is taught, if he proves teachable, how to think about his real-world challenges. By category, he knows what he needs to worry about and he understands, again by broad category, how he might succeed in evading or defeating many of the causes for his anxiety. Alert both to complexity and to the wholeness of his subject, the strategist also knows that the categories he employs to achieve some mental order all interpenetrate to help produce messily compounded strategic effects and consequences. Between high theory and command practice for and in combat lies the enabling agency of doctrine. Only the educated strategist can be trusted to develop the multilevel body of doctrine that must serve to staple together synergistically efforts in performance at every level of warfare.

Clausewitz—who else?—provides a thoroughly persuasive explanation of why theory has value for practice. In justly honored language, we are advised that “theory exists so that one need not start afresh each time sorting out the material and plowing through it but will find it ready to hand and in good order.”⁵ He advises also that “theory need not be a positive doctrine, a sort of *manual* for action.” Rather, “it is meant to educate the mind of the future commander, or more accurately, to guide him in his self-education, not to accompany him to the battlefield.”⁶

The case for general strategic theory is inscribed in the whole practice and malpractice of strategy throughout history. Theory

when policymakers, soldiers, and commentators are ill educated in strategic theory, they misuse concepts, and such misuse contributes readily to unsound planning and faulty behavior

Admiral Mullen addresses Marines deploying to Afghanistan as part of President Obama's troop surge



U.S. Navy (Charlie Cullen)

requires clarity and suitability of definition and the specification of relationships among distinguishable elements in the structure of the subject. Also, not least, theory provides explanation of causation. When policymakers, soldiers, and commentators are ill educated in strategic theory, they misuse concepts, and such misuse contributes readily to unsound planning and faulty behavior. For a leading example, a fundamental lack of intellectual grip upon the distinctive natures of policy, strategy, and tactics licenses appalling self-harming misuse of the adjective *strategic*. If theory does not educate as to the difference between a policy instrument and that instrument itself—as, for an historical example, in the *Strategic Air Command*, or *strategic* missiles, or the *strategic* deterrent—then the strategy function is unlikely to be well served. If a military force is called strategic, an existential meaning of that force is asserted. Such a claim is a logical, and often will be a practical, absurdity. Since the tactical behavior of all troops has strategic consequences, be they ever so modest, it follows that the adjective is deprived of sense.

By no means can the general theory of strategy provide all the education that a practicing executive strategist requires and

should be able to employ usefully. In addition to book-learned theory, the strategist will be educated by professional enculturation, informal as well as formal, by personal experience, and by wider extra-strategic learning. Probably the example of examples was the influence of Homer on Thucydides, and indeed on all Greeks of that period.⁷ Whatever may be said in praise of the *Iliad* and the *Odyssey*, in the military dimension they are far more tactical than strategic. How much, how well, and what the strategist acquires by way of strategic education will depend considerably upon his biology, psychology, and the accidents of time and place that provided the unique contexts, perhaps the strategic moments, for his instruction. The strategist learns his strategy not only with reference to what the classics and culture and events bring to him. Just as much, the strategist's education is shaped, even sometimes determined, by what the mind and body of the individual human being bring to the education on offer. It is agreeable to note that Clausewitz advises that: "[theory] must also take the human factor into account, and find room for courage, boldness, even foolhardiness. The art of war deals with living and with moral forces. Consequently, it cannot attain the absolute,

or certainty; it must always leave a margin for uncertainty, in the greatest things as much as in the smallest."⁸

These words should shake the confidence of theorists who seek to purvey a science of strategy. There continue to be theorists who believe that, for example, war's fog and friction can be dispersed and avoided by reliable material means. Such foolish people fail, or at least refuse, to recognize that the most significant dimension to the strategic function is the human. Moreover, a noteworthy aspect to this human dimension of difficulty and achievement is the adversary's nature and character.

Stripped to the barest, one can claim that strategic theory is an aid to clear, perhaps just clearer, thinking about all aspects of war and peace, nested in political and other contexts, domestic and foreign. In its general form, this theory provides clarity in definition, in identification of relationships, and in causation, which is to say in the crucial matter of consequences. In truth, strategic theory is not an optional extra. All practical strategists practice the theory of strategy. They differ only in the quality of their practice, a quality that most historical experience tries to tell us can and should owe much to strategic education.

ISAF Joint Command Commander Lieutenant General David M. Rodriguez talks to Afghan National Army officer



Strategy is Possible but Difficult

Strategy is not an illusion.⁹ However, it is so difficult to do well enough, let alone brilliantly, that a security community needs to provide some redundancy of high competence in the activities most vital to strategic performance in order to have a reserve supply of strategists to replace those who appear to fail. This means that the strategist's role needs to be well supported by prudence in policy, efficiency in organizational system, method in process, and—last but not least—effectiveness in the combat power available. The less prudent his policy guidance, the more constipated the organizational machinery of strategy-making and execution by the chain of command, and the less impressive the fighting power of his soldiers, the heavier the burdens that must be laid upon strategy and the strategist. More often than not, the contemporary strategist will lack a spark of genius sufficient to compensate, personally, for the multiple dysfunctions, the friction, that harass and inhibit his overall command performance.

The bad news for the would-be strategist is truly forbidding in severity, scope,

and number. An adequate grasp of the range of difficulties by category for the strategist cannot afford to note fewer than eight:

- existential (misunderstanding of the nature and purpose of strategy)
- the enemy (frequently neglected, almost invariably misassessed)
- currency conversion (command performance as military events in the five geographies of contemporary battlespace need to be converted into strategic and then political consequences)
- strategy-making (poor, even dysfunctional, organization and process for strategy-making)
- human performance (reflecting the influences, not always positive, of culture, biology, psychology, and historical situation)
- complexity (there are too many things that can go wrong for them all to be evaded)
- friction (the mainly unknowable and unpredictable unknowns that can impair performance)
- civil-military relations (dysfunctional asymmetries among soldiers, politicians, and civil servants).

Each of the eight categories of problems for the strategist has the potential to harm his ability to perform the bridging function between policy and army. Some of the eight are well known and appreciated, but others merit more explicit recognition. For example, there continues to be an existential problem of understanding that hinders strategic performance. Rephrased, although strategic effect must be generated simply by the consequences of all tactical behavior and misbehavior, with or without much operational direction, a deficit in the grip needed for purposeful strategic command is apt to prove fatal in the waging of war as a whole. Tactically, one may win, at least not lose, most of the warfare, yet because there was a strategy deficit, the war must be lost. Examples abound: Napoleonic France, imperial and Nazi Germany, France in Algeria, the United States in Vietnam, the United States and Britain in Iraq (2003–2007), and the United States, Britain, and North Atlantic Treaty Organization in Afghanistan from 2001 to the present.

Since military behavior always must have some strategic effect on the course of

history, the absence of a strategy, a theory of victory in war worthy of the name, does not mean that that behavior must lack strategic consequences. Far from it. One need look no further than to America's record of warfare waged tactically with adequate competence in Southeast Asia between 1965 and 1973 and the apparently paradoxically abysmal strategic and political result.¹⁰ Since history abhors a vacuum, the gap that the strategy bridge should span is filled by encroachment on the part of the political, operational, and tactical functions. Such mission creep may be characterized as the politicization and tacticalization of strategy, though it might be more perceptive to recognize that enhanced roles for politics and tactics substitute for, rather than capture, strategy.¹¹ The strategy bridge cannot be seized by politics or by tactics (or operations). If the bridge is not manned by strategists, it does not function—period.

It is important to be clear as to the inherent difficulty of purposeful strategic performance. It is no small task to plan military operations such that one should be able to control events militarily in such a way and to such a degree that the political future is shaped favorably. This strategic function necessarily entails prediction in the face of typically formidable problems. Moreover, ironically, if one succeeds militarily far beyond one's expectations—the Germans in May-June 1940, for example—the challenge is extreme in deciding how far, indeed how, to exploit such success. Again more than a little ironically, if one is dealt too weak a military hand to succeed tactically and operationally, strategic excellence may, or may not, be demonstrated in the way in which one copes with defeat.

Several senior American military professionals, whose names must be withheld in order to protect the guilty, have confided to this theorist an astrategic, bordering on an antistrategic, proposition. They have suggested that when a country is so potent in the quantity and tactical effectiveness of its armed forces that it should always win the warfare, it has scant need for strategy. Rephrased: perform well enough tactically and perhaps operationally, and strategy, as the necessary strategic effect, will take care of itself. This is a vintage misreading of Field Marshal Helmuth Graf von Moltke's expression of apparent disdain for strategy in favor of tactics.¹²

Of all the problems that beset the strategist and fuel yet further difficulties, the super category of sheer complexity and consequent

potential for multiple disharmonies warrants special mention. No matter how clearly the human actors leading a belligerent polity in war and warfare understand the essential unity of all their behaviors, the reality of performance on the different levels of conflict unavoidably promote what can be a lethal cumulative mega-disharmony. In theory, each of war's levels should complement each other. War is so much a gestalt that the relations among policy, grand strategy, military strategy, operations, and tactics need to be understood to be horizontal in their interdependencies, as well as vertical in their chain of command authority.¹³ But each of these standard levels of behavior has its own nature, reflected in unique dynamics, needs, and concerns. For example, tactical performance does not naturally serve operational design optimally. And operational success need not contribute to strategic achievement in a way at all proportionate to its costs. For a capstone negative, we have to note that even a strategically well-conducted conflict might not be succeeded by a sustainably stable, tolerable political order. When military and strategic performances retire from center stage, largely to be replaced by active diplomacy (and relevant domestic politics), there will be no guarantee that the blood and treasure expended will be cashed competently by the politicians. Tolerable cooperation among the levels of a polity's or coalition's effort in conflict has to be made to happen, but such harmonization will never be a natural process than can safely be left to some Hidden Hand of History that functions on autopilot.

Incredibly, purposeful centralized strategy can and sometimes does function in practice, though rarely as well as in theory, let alone elegantly, but frequently well enough. How can this be, given the problems that can threaten to render it irrelevant or worse?

First, every category of difficulty that in principle must threaten to defeat a belligerent strategically also must menace the enemy in principle. One can hardly repeat too often the reductionist Clausewitzian mantra that "war is nothing but a duel on a larger scale."¹⁴ There is no need to excel strategically in order to win a war or succeed in competition. Rather, there is need only to perform to better net strategic effect than does the enemy. Second, war's very complexity contains within its diversity the possibilities of compensation for particular failures and weaknesses. Provided a competitive weakness is not unduly imperial

even a strategically well-conducted conflict might not be succeeded by a sustainably stable, tolerable political order

in domain and severity—for example, a catastrophic collapse in the morale of the polity's main army, such as the Italian army at and following the disastrous battle of Caporetto (October 24–November 12, 1917)—fungibility may be commanded to ride to the rescue.¹⁵ For a while the U.S. Navy loses its battle line in the Pacific because of the tactical loss at Pearl Harbor, so the fleet aircraft carriers must step up to take the strain. Of course, there will be occasions when no compensation fit for purpose can be located and applied. However, not for nothing is the strategist's second master question, "What are the alternatives?" (The first question is, "So what?")¹⁶ The U.S. Navy in 1942 did not answer the second of the strategist's questions by refraining from offensive action pending the restoration to health of its battle line in the Pacific.

Strategists, Command, and Strategic Effect

The strategy bridge, like Florence's Ponte Vecchio, can carry many buildings (as well as, incredibly, a secret passage), but it is the human strategist who must make the bridge work. One can identify with confidence a standard set of distinguishable roles that always need to be performed if purposeful strategy is to be a reality. For a polity to have and attempt to execute a strategy, it must provide for performance of the following roles: politician-policymaker; theorist-planner; and commander who has to manage and lead. The three functions indicated almost with unduly graphic clarity by the bridge metaphor are purpose, strategy, and tools (ends, ways, and means). The bridge need not only be anchored on its political and military banks, but it can also extend some distance overland from the water. Since the nature of the broad strategic function is to staple military and other behaviors to political interests, motives, and goals, it is obvious that there cannot be barriers at each end of the bridge. The executive strategist, as contrasted with a scholar writing strategic theory, has some need to think and talk politically in order to understand and probably try to influence the content of his policy guidance for a better fit

with his practicable ways and available means. Also, he often will be better served should he be able to improve the strategic and military education of both his political masters and his military and civilian subordinates.

The strategic function—hence, the domain of the strategist—cannot be confined to the realm of ideas, even when those ideas are expressed in plans and doctrine manuals. After all, “strategic theory is a theory for action.”¹⁷ The strategist is not only a sponsor of the world of practice—at least, he should not only be such. His strategy exists strictly as a contingent theory for victory, a plan devised to solve—or, at the general level, to help solve via education—actual or anticipated problems. It follows that the role of the strategist is meaningless absent provision for strategy execution. Whether or not the principal conceptualizer of a strategy is designated to command its implementation in the field, the function of command must feature prominently on the strategy landscape. Both as general theory and as historically unique plans, the purpose of strategy is to improve a polity’s competitive performance. And the quality of that performance should be influenced to advantage by a choice of strategy executed by armed forces commanded by people who endeavor to achieve a purposeful control of events. This apparently complex, yet essentially simple, process is most likely to happen advantageously when all the many behaviors commanded are controlled for complementary and synergistic impacts and consequences. Such command and control, no doubt devolved as it must be to and among many layers in the military hierarchy, is integral to the strategic function. To repeat the logic: a master strategic idea, a dominant narrative, should drive the design of actual plans, and those plans must be executed by forces that are commanded and controlled so that their efforts serve a common, centrally intended purpose. The existence, promulgation, understanding, and use of a coherent body of authoritative sound military doctrine should contribute notably to the achievement of such purpose.

What does strategy produce? The answer is as challengingly opaque as it is unavoidable: strategic effect. Apparent tautology or not, this concept has to be the keystone in the arch of the strategy bridge. Performance of the strategic function can only be to generate desired effect upon the future course of events. The subject is as straightforward as this, even though all matters of strategy

design, decision, and execution in an adversarial environment are inherently complex and typically are uncertain far into the zone of unpredictability. Strategic effect is one among those mysterious qualities that cannot be observed and measured directly—security, love, happiness, and grief are examples of others. But even if we are unable to record strategic effect exactly, we can and must try hard to recognize evidence of its current condition. Its future impact typically will be a topic fit only for guesswork, but we can find material evidence of its recent and current presence. For example, the hasty retreat by the ragged remainder of the German army from Normandy toward the frontier of the Third Reich in August 1944 yielded unmistakable evidence of massive positive strategic effect achieved by Allied command performance. But what did this German retreat-cum-rout mean? Would the war be over in 1944? How much fight was left in the *Wehrmacht*? The answer could not be calculated. This was not a metric challenge.

Strategists cannot escape the laws of physics, even though their job requires them to seek to control some aspects of the future. Although competent strategists and more than adequate commander-managers often do succeed in shaping events to a broadly advantageous outcome, it is never possible for them to remove entirely the potentially sovereign role of chance in war. Yet again, Clausewitz is thoroughly persuasive. He specified chance and its dependent associate, uncertainty, as an organic component of the “climate of war.”¹⁸ No matter how cunningly theorists strive, they cannot eliminate uncertainty from war. In truth, knowledge of nearly everything about the future, in almost any detail below the generic, is precisely unknowable. And yet the strategist’s core duty is to develop, and to see commanded in physical performance, plans that are predictions and contingent intentions—in other words, theories. The strategist’s plans purport to explain how desired endstates will be achieved.

Strategic effect, the dynamic and more than slightly unpredictable result of the strategist’s labors, is the product of every element specified as acting and interacting in the complete general theory of strategy. In principle, nothing in this general theory is irrelevant to any particular historical context, but the many subjects must play roles of variable significance from case to case. The strategist’s plan must seek to anticipate how

strategists cannot escape the laws of physics, even though their job requires them to seek to control some aspects of the future

tactical action, commanded for operational level consequences, will shape the course of future events; assessed overall, this is strategic effect. For more reasons than it would be sensible to attempt to itemize comprehensively, it is difficult to perform even competently as a strategist, let alone as a strategist of true historical distinction. Happily for most of history’s would-be strategists, which is to say for those with average biological endowment, education, experience, and luck, there is need only to be good enough.

Strategic effect is felt and has consequences in stages and across levels of conflict, and the transitions from one level to another are not reliably predictable. By stages, strategic effect happens and is felt in first-order, second-order, and probably third-order and beyond, consequences, untraceably in confirmable detail. Tactical first-order effects should have second-order tactical and operational effects, and those effects should have meaning in strategic effect. Alas, strategy is apt to be curved in its trajectory of consequences. Tactical behavior may well be the trackable product of a grand strategic design, but in its turn, it could blow back to reshape the strategy itself.

Theorists of a metric persuasion who strive against heavy odds to convert the art of strategy into applied quantifiable science are always going to be outmaneuvered fatally by the authority of the contextuality as well as the contingency of events. Strategic effect and its achievement via command performance strategically, operationally, and tactically must be a product whose weight is determined by dynamic and unique circumstances. Defeat in battle may, or may not, so demoralize an army or a nation that its morale sags beyond recovery.¹⁹ The strategic meaning of tactical and operational success and failure can be anticipated, guessed intelligently, but by no means can it be predicted with rock-like reliability.

The Good (Enough) Strategist

To conclude on a moderately upbeat note, strategy is possible; the strategist often

can succeed because true excellence in his calling is rarely necessary. The victorious strategist need not even be the particularly good strategist. Because the strategist has to perform as a duelling competitor, he need only be good enough to achieve by his command performance a necessary measure of control over the enemy's decisions. The quality and quantity of that enemy (and enmity) decide just how good the strategist has to be, always assuming obedience to the rule of prudence in the provision of his political guidance. For some comfort, it is more than a little encouraging to reflect upon these words by the journalist-novelist Robert Harris: "In the absence of genius there is always craftsmanship."²⁰ The strategist strictly does not require the right stuff, only enough of the right-enough stuff to meet the challenge of the day. For him to do that, he can only benefit from some education by a general theory designed and refined to assist practice.

Happily, perhaps, although the general theory of strategy can be rewritten endlessly, with each drafting reflecting the time, place, circumstance, and personality of the theorist, it does not necessarily register progress in comprehension. The general theory can be identified and explained at any time and in any place and circumstance in history. This theory for the strategic function must be expressed in the manner characteristic of the period, but it does not have a linear and progressive intellectual narrative. Clausewitz is superior in important respects to Thucydides and Sun Tzu, but that is not because he wrote 2,200 and more years later than did they. The strategic function is universal and eternal and is not the product of culturally circumscribed conceptualization. It follows, therefore, that great works of general strategic theory in principle can have equal value for today and tomorrow and can be written at any location and at any of history's many moments, those both allegedly momentarily "strategic" and those that plainly are much less plausibly so. Everything there is to know about strategy as the basis for general theory was as knowable in ancient Greece as it was in early 19th-century Prussia and as it is today. Strategy, not strategies, endures. **JFQ**

NOTES

¹ Marshal (Ferdinand) Foch, *The Principles of War*, tr. Hilaire Belloc (London: Chapman and Hall, 1921), 14. See Bernard Brodie, *Strategy in the Missile*

Age (Princeton: Princeton University Press, 1959), ch. 2, and *War and Politics* (New York: Macmillan, 1973), ch. 1.

² Carl von Clausewitz, *On War*, tr. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976); Sun Tzu, *The Art of War*, tr. Ralph D. Sawyer (Boulder: Westview Press, 1994); Thucydides, *The Landmark Thucydides: A Comprehensive Guide to The Peloponnesian War*, ed. Robert B. Strassler, rev. tr. Richard Crawley (New York: Free Press, 1996); Basil H. Liddell Hart, *Strategy: The Indirect Approach* (London: Faber and Faber, 1967), and *The Revolution in Warfare* (London: Faber and Faber, 1946); J.C. Wylie, *Military Strategy: A General Theory of Power Control* (Annapolis: Naval Institute Press, 1989); Edward N. Luttwak, *Strategy: The Logic of War and Peace*, rev. ed. (Cambridge: Harvard University Press, 2001); Niccolo Machiavelli, *The Art of War*, tr. Ellis Farnsworth (Indianapolis: Bobbs-Merrill, 1965), *Discourses on Livy*, tr. Julia Conaway Bondarella and Peter Bondarella (Oxford: Oxford University Press, 2003), and *The Prince*, tr. Peter Bondarella and Mark Musa (Oxford: Oxford University Press, 1998); Antoine Henri de Jomini, *The Art of War* (London: Greenhill Books, 1992); Bernard Brodie, ed., *The Absolute Weapon: Atomic Power and World Order* (New York: Harcourt Brace, 1946), *Strategy in the Missile Age*, and *War and Politics*; and Thomas C. Schelling, *The Strategy of Conflict* (Cambridge: Harvard University Press, 1960), and *Arms and Influence* (New Haven: Yale University Press, 1966).

³ A period piece that has residual significance is Desmond Ball and Jeffrey Richelson, eds., *Strategic Nuclear Targeting* (Ithaca: Cornell University Press, 1986). Also see Lawrence Freedman, *The Evolution of Nuclear Strategy*, 3^d ed. (Basingstoke: Palgrave Macmillan, 2003), and Keith B. Payne, *The Great American Gamble: Deterrence Theory and Practice from the Cold War to the 21st Century* (Fairfax, VA: National Institute Press, 2008).

⁴ General wisdom on war planning is in short supply; one should begin with Clausewitz, book eight, "War Plans." After *On War*, one admittedly struggles to find much enlightenment. Some help can be derived from Steven T. Ross, *American War Plans, 1941–1945* (London: Frank Cass, 1997), xiii–xx, and Talbot C. Imlay and Monica Duffy Toft, eds., *The Fog of Peace and War Planning: Military and Strategic Planning under Uncertainty* (Abingdon: Routledge, 2006).

⁵ Clausewitz, 141.

⁶ Ibid. Emphasis in original.

⁷ See M.I. Finley's introduction to Thucydides, *History of the Peloponnesian War*, tr. Rex Warner (London: Penguin Books, 1972), 9–32.

⁸ Clausewitz, 86.

⁹ See Richard K. Betts, "Is Strategy an Illusion?" *International Security* 25 (Fall 2000).

¹⁰ For a range of perspectives, see Andrew F. Krepinevich, Jr., *The Army and Vietnam* (Bal-

timore: Johns Hopkins University Press, 1986); Jeffrey Record, *The Wrong War: Why We Lost in Vietnam* (Annapolis: Naval Institute Press, 1998); Mark W. Woodruff, *Unheralded Victory: Who Won the Vietnam War?* (London: HarperCollins Publishers, 1999); and C. Dale Walton, *The Myth of Inevitable U.S. Defeat in Vietnam* (London: Frank Cass, 2002).

¹¹ Although by definition warfare is waged for political ends, this necessary fact does not mean that politics and warfare are fused. Acts of organized violence committed for political purposes may be regarded as a form of political behavior—war is armed politics and suchlike formulae—but warfare has a lore and dynamic all its own, no matter what the political intentions might be. Clausewitz is admirably explicit on this point: "Its [war's] grammar, indeed, may be its own, but not its logic." Clausewitz, 605. On the malady of the tacticization of strategy, see Michael I. Handel, *Masters of War: Classical Strategic Thought*, 3^d ed. (London: Frank Cass, 2001), 355–360.

¹² Helmuth von Moltke, *Moltke on the Art of War: Selected Writings*, tr. Daniel J. Hughes and Gunther E. Rothenberg (Novato, CA: Presidio Press, 1993), 47.

¹³ See Handel, 353–360.

¹⁴ Clausewitz, 75.

¹⁵ German General Otto von Below assaulted 41 Italian divisions with 45 (7 German, 38 Austro-Hungarian) divisions and routed them in a classic panic. The Italians lost 40,000 casualties, and 275,000 were taken prisoner. The loss of materiel was formidable (2,500 guns were captured by von Below's storming troopers), but his victorious forces lacked the logistical means to convert a tactical victory into either an operational or a strategic decision. The complexity of war and warfare has a way of frustrating those who are only tactically outstanding.

¹⁶ See Colin S. Gray, *The Strategy Bridge: Theory for Practice* (Oxford: Oxford University Press, 2010), 16.

¹⁷ Brodie, *War and Politics*, 452.

¹⁸ Clausewitz, 104.

¹⁹ For example, in the estimation of the victor, Hannibal Barca, the catastrophic defeat of the army of the Roman Republic at Cannae in 216 BCE should have led to Rome suing for the best peace terms with Carthage that it could negotiate. In the instructive words of Adrian Goldsworthy, "[b]y his own understanding of war Hannibal won the Second Punic War at Cannae, but the Romans were following a different set of rules and when they did not admit defeat there was little more that he could do to force them." See Goldsworthy, *Roman Warfare* (London: Cassell, 2002), 85. Britain's defeat in Flanders in May 1940 was far less bloody than was Rome's at Cannae, but it appeared to place her in scarcely more hopeful a strategic situation.

²⁰ Robert Harris, *The Ghost* (London: Hutchinson, 2007), 141.

A Diplomat's Philosophy

By MARC GROSSMAN

PHILOSOPHE MVR

Sir Henry Wotton, 17th-century author
and British ambassador to Venice

National Portrait Gallery, London

One damaging consequence of Wiki Leaks has been the resurrection of the statement by Sir Henry Wotton, who served King James I as ambassador to Venice, that “an Ambassador is an honest man, sent to lie abroad for the good of his country.”¹

There are questions to answer about how 250,000 State Department cables found their way to Wiki Leaks, but a lingering public impression that diplomacy is tainted because it is carried out by patriotic people pledged to the advancement of their country and may sometimes be better accomplished in private than in public leads to a larger challenge: trying to define a diplomatic world view. Is there a philosophy that describes diplomacy’s uplifting qualities? In this essay, I draw on my career to consider, in light of Wiki Leaks, how I would describe a diplomat’s philosophy.

Such a personal essay begins with three statements of what such a philosophy is not. First, it is not a consideration of a philosophy of international relations or a commentary on thinkers such as Immanuel Kant and their relevance to and impact on the international system in which diplomats work. Second, it is not a scholarly work. My perspective remains that of a practitioner of diplomacy. Third, this reflection is not designed to be universal. American diplomats may recognize the fundamentals of this philosophy, and perhaps some of our friends and allies will as well. However, as I will argue below, if pluralism is one of the foundations of this diplomat’s philosophy, then we should not be surprised to find other diplomatic constructs operating around the world.

Four Principles of a Diplomatic Philosophy

If Sir Henry Wotton does not accurately portray a philosophy for a diplomat, what might constitute one? Let us consider four principles as a foundation: optimism, a commitment to justice, truth in dealing, and realism tempered by pluralism.

First, optimism. Twenty-nine years in the U.S. Foreign Service taught me that the

American diplomats know that the choices their own country makes about issues such as resilience, health care, infrastructure, and the balance between rights and security will form the foundation for their representation around the world

best diplomats are optimists. They believe in the power of ideas. They believe that sustained effort can lead to progress. They believe that diplomacy, backed when needed by the threat of force, can help nations and groups avoid bloodshed.

This belief in optimism and the pursuit of action on behalf of the nation requires making choices, often between two poor alternatives. John W. O’Malley, in his book *Four Cultures of the West*, describes the prophetic, academic/professional, humanistic, and artistic cultures all as being part of larger Western philosophy. He puts statesmen in “culture three” (humanistic) because they are concerned with contingencies. O’Malley says a statesman must ask: “Is war required of us now, under these circumstances?” A statesman argues, therefore, from:

probabilities to attain a solution not certain but more likely of success than its alternatives. Like the poet, then, the statesman deals with ambiguities, very unlike the protagonist from culture two, who traditionally argued from principles to attain truth certain and proved to be such; cultures two and three represent, thus, two different approaches to problem solving. Like the prophet of culture one, the statesman of culture three wants to change society for the better, but to do so he seeks common ground and knows that to attain his end he must be astute in compromise. He does not shun the negotiating table.²

Henry Kissinger, in his book *Diplomacy*, made a similar observation:

Intellectuals analyze the operations of international systems; statesmen build them and there is a vast difference between the perspective of an analyst and that of a statesman. The analyst can choose which problem he wishes

to study, whereas the statesman’s problems are imposed on him. The analyst can allot whatever time is necessary to come to a clear conclusion; the overwhelming challenge for the statesman is the pressure of time. The analyst runs no risk. If his conclusions prove wrong, he can write another treatise. The statesman is permitted only one guess; his mistakes are irretrievable. The analyst has available to him all the facts; he will be judged on his intellectual power. The statesman must act on assessments that cannot be proved at the time that he is making them; he will be judged by history on the basis of how wisely he managed the inevitable change and, above all, by how well he preserves the peace.³

Put another way, the diplomat sees herself or himself as the person Theodore Roosevelt described as “in the arena,” who strives “to do the deeds.”⁴

Second, a commitment to justice. Kissinger, often criticized by those who subscribe to Wotton’s description of diplomacy, is clear that the only successful international orders are those that are just.⁵ He goes on to note that this requirement for justice is intimately connected to the domestic institutions of the nations that make up the international system. That is why, for this diplomat’s philosophy, the American commitment to political and economic justice, not just at home but also abroad, is a crucial connection.⁶ It is this link that emerges in the press reports of Wiki Leaks as American diplomats pursue policies that promote the sanctity of the individual, the rule of law, and fairness in economic life. American diplomats know that the choices their own country makes about issues such as resilience, health care, infrastructure, and the balance between rights and security will form the foundation for their representation around the world.

Third, truth in dealing. Sir Henry Wotton and his contemporary Wiki Leaks-inspired celebrants are wrong. Untruthful diplomacy is unsuccessful diplomacy. As Harold Nicolson wrote in his classic book *Diplomacy*, first published in 1939, “My own practical experience, and the years of study which I have devoted to this subject, have left me with the profound

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Ambassador Grossman (center) speaks with U.S. and Tajik officials at bilateral consultation with Tajikistan government in Dushanbe

State Department

conviction that 'moral' diplomacy is ultimately the most effective, and that 'immoral' diplomacy defeats its own purposes." In his chapter on the "Ideal Diplomatist," Nicolson says that the first virtue of the ideal diplomat is truthfulness. "By this is meant, not merely abstention from conscious mis-statements, but a scrupulous care to avoid the suggestion of the false or the suppression of the truth. A good diplomatist should be at pains not to leave any incorrect impressions whatsoever upon the minds of those with whom he negotiates."⁷ Garrett Mattingly expands on this conviction when, after describing the fundamentals of diplomacy, he notes that:

*If all this says more about the value of patience, truthfulness, loyalty and mutual confidence, and less about bluff, bedazzlement, intrigue and deception than might be considered appropriate for the century in which Machiavelli was born, perhaps it is not the less realistic on that account. Scholars and literary men often seem more given to the inverted idealism of real politik than working diplomats. In the long run, virtue is more successful than the most romantic rascality.*⁸

Fourth, realism tempered by a commitment to pluralism. It is not a coincidence that the search for useful foreign policy paradigms

after the American invasions of Afghanistan and Iraq has led some observers back to the work of Reinhold Niebuhr. Andrew J. Bacevich has written an introduction to a reissued edition of Niebuhr's *The Irony of American History*. Brian Urquhart highlighted Bacevich's introduction and Niebuhr's words and warnings in a review in the *New York Review of Books*. Robert Kagan called on Niebuhr's insights to help him define the debate between what he described as "old and new realism."⁹ The return of interest in Niebuhr (including from President Barack Obama) is based both on Niebuhr's pessimistic view of the international system and on his belief in the limits of what America can do to change the world in which we find ourselves.

Bacevich maintains that the truths Niebuhr spoke are uncomfortable for us to hear: "Four such truths are especially underlined in *The Irony of American History*: the persistent sin of American exceptionalism; the indecipherability of history; the false allure of simple solutions; and, finally, the imperative of appreciating the limits of power."¹⁰ As Niebuhr himself wrote: "Our dreams of bringing the whole of human history under the control of the human will are ironically refuted by the fact that no group of idealists can easily move the pattern of history toward the desired goal of peace

and justice. The recalcitrant forces in the historical drama have a power and persistence beyond our reckoning."¹¹ Or, in words particularly relevant to a post-Afghanistan and Iraq United States, Niebuhr says, "For our sense of responsibility to a world community beyond our own borders is a virtue, even though it is partly derived from the prudent understanding of our own interests. But this virtue does not guarantee our ease, comfort, or prosperity. We are the poorer for the global responsibilities which we bear and the fulfillments of our desires are mixed with frustrations and vexations."¹²

Niebuhr challenges (or at least complicates) the diplomat's philosophy of optimistic, realistic actions in the pursuit of justice:

*The ironic elements in American history can be overcome, in short, only if American idealism comes to terms with the limits of all human striving, the fragmentariness of all human wisdom, the precariousness of all historic configurations of power, and the mixture of good and evil in all human virtue. America's moral and spiritual success in relating itself creatively to a world community requires not so much a guard against the gross vices, about which the idealists warn us, as a reorientation of the whole structure of our idealism. That idealism is too oblivious of the ironic perils to which human virtue, wisdom and power are subject. It is too certain that there is a straight path toward the goal of human happiness; too confident of the wisdom and idealism which prompt men and nations toward that goal; and too blind to the curious compounds of good and evil in which the actions of the best men and nations abound.*¹³

President Obama's speech in Oslo at the acceptance of the Nobel Peace Prize in 2009 started with an optimistic view of the future. But Obama then reminded the audience that "we must begin by acknowledging the hard truth: we will not eradicate violent conflict in our lifetimes. There will be times when nations—acting individually or in concert—will find the use of force not only necessary but morally justified." President Obama recognized that this conflicts with the vision of Martin Luther King, Jr., to whom the President acknowledges he owes so much, and with the philosophy of Gandhi. However:

As a head of state sworn to protect and defend my nation, I cannot be guided by their



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Former Secretary of State Henry Kissinger and Secretary Clinton talk at State Department

*examples alone. I face the world as it is, and cannot stand idle in the face of threats to the American people. For make no mistake: Evil does exist in the world. A non-violent movement could not have halted Hitler's armies. Negotiations cannot convince al-Qaeda's leaders to lay down their arms. To say that force may sometimes be necessary is not a call to cynicism—it is a recognition of history; the imperfections of man and the limits of reason.*¹⁴

The Diplomat's Dilemma

So what has become of the diplomat's philosophy? Part is rooted in Niebuhr's realism. Most diplomats have seen too much in too many places to remain unvarnished optimists. But while diplomats are children of Niebuhr, he is not their only intellectual parent. For me, the debt to Niebuhr is tempered by two other points: first, a commitment to political and economic pluralism and, second—recognizing the importance of Niebuhr's cautions—a belief, based on America's founding principles, that the United States has an important and potentially unique role to play in the modern world. This is Niebuhr leavened by Sir Isaiah

Berlin's ideas about pluralism, Kwame Anthony Appiah's description of cosmopolitanism, and my belief in the continuing importance of American values and power.

Just as those seeking a framework for U.S. foreign policy after Iraq and Afghanistan have returned to the writings of Reinhold Niebuhr, some have also sought the wisdom of Isaiah Berlin. The Oxford University Press has reissued many of Berlin's greatest works, including "Two Concepts of Liberty." In his review of a new book of Berlin's letters in the *New York Review of Books* in February 2010, Nicholas Kristof asks: "What exactly is Berlin's legacy and philosophy? To me, it is his emphasis on the 'pluralism of values,' a concept that suggests a non-ideological, pragmatic way of navigating an untidy world."¹⁵ In his biography of Berlin, Michael Ignatieff writes that Berlin:

never claimed to have been the first to think about pluralism. But Berlin had reason to believe that he was the first to argue that pluralism entailed liberalism—that is, if human beings disagreed about ultimate ends, the political system that best enabled them

most diplomats have seen too much in too many places to remain unvarnished optimists

*to adjudicate these conflicts was one which privileged their liberty, for only conditions of liberty could enable them to make the compromises between values necessary to maintain a free social life.*¹⁶

Berlin himself writes in "Two Concepts of Liberty" that:

pluralism . . . seems to me a truer and more humane ideal than the goals of those who seek in the great disciplined, authoritarian structures the ideal of "positive" self mastery by classes, or peoples, or the whole of mankind. It is truer, because it does, at least, recognize the fact that human goals are many, not all of them commensurable, and in perpetual rivalry with one another. To assume that all values can be graded on one scale, so that it is a mere matter of inspection to determine the

President Reagan and Soviet General Secretary Mikhail Gorbachev meet at 1985 summit in Geneva



highest, seems to me to falsify our knowledge that men are free agents, to represent moral decision as an operation which a slide rule could, in principle, perform.¹⁷

Kristof highlights the final paragraphs of “Two Concepts of Liberty,” in which Berlin speaks to a seeker of diplomatic philosophy:

It may be that the ideal of freedom to choose ends without claiming eternal validity for them, and that the pluralism of values connected with this, is only the late fruit of our declining capitalist civilizations: an ideal which remote ages and primitive societies have not recognized, and one which posterity will regard with curiosity, even sympathy, but little comprehension. This may be so; but no skeptical conclusions seem to me to follow. Principles are not less sacred because their duration cannot be guaranteed. Indeed, the very desire for guarantees that our values are eternal and secure in some objective heaven is perhaps only a craving for the certainties of childhood or the absolute values of our primitive past.¹⁸

Appiah's book *Cosmopolitanism* takes a commitment to pluralism and embeds it in a philosophy which many diplomats will recognize as part of their world view. Appiah writes:

So there are two strands that intertwine in the notion of cosmopolitanism. One is the idea that we have obligations to others, obligations that stretch beyond those to whom we are related by the ties of kith and kind, or

even the more formal ties of a shared citizenship. The other is that we take seriously the value not just of human life but of particular human lives, which means taking an interest in the practices and beliefs that lend them significance. People are different, the cosmopolitan knows, and there is much to learn from our differences. Because there are so many human possibilities worth exploring, we neither expect nor desire that every person or every society should converge on a single mode of life. Whatever our obligations are to others (or theirs to us) they often have the right to go their own way . . . there will be times when these two ideals—universal concern and respect for legitimate difference—clash. There is a sense in which cosmopolitanism is the name not of the solution but of the challenge.¹⁹

Appiah's ideas connect to Berlin's credo: “One distinctively cosmopolitan commitment is to pluralism. Cosmopolitans think that there are many values worth living by and that you cannot live by all of them so we hope and expect that different people and different societies will embody different values (but they have to be values worth living by).”²⁰

To be fair, Niebuhr is part of this pluralistic vision as well. Keeping in mind that he was writing in 1952, Niebuhr notes that:

Today the success of America in world politics depends upon its ability to establish community with many nations, despite the hazards created by pride of power on the one hand and the envy

of the weak on the other. This success requires a modest awareness of the contingent elements in the values and ideals of our devotion, even when they appear to us to be universally valid; and a generous appreciation of the valid elements in the practices and institutions of other nations though they deviate from our own.²¹

And what of American values and power? It is with trepidation that I disagree with Niebuhr when it comes to the importance of maintaining America's commitment to acting on behalf of freedom and justice in the world, but Niebuhr also says that we must never come to terms with tyranny.²² America was founded, as Robert Kagan has written, with the Declaration of Independence as its first foreign policy document.²³ The United States still has a special role to play in supporting political and economic pluralism around the world. It will cause us the discomfort that Niebuhr describes, but it is both part of our destiny and among the most important reasons that American diplomats go out each day to do our nation's bidding.

The issue is joined by Kagan in his *Wall Street Journal* article “Power Play.” Kagan calls for a “bit of realism” to challenge “the widespread belief that a liberal international order rests on the triumph of ideas alone or the natural unfolding of human progress.” He notes that:

The focus on the dazzling pageant of progress at the end of the Cold War ignored the wires and the beams and the scaffolding that had made such progress possible. The global shift toward liberal democracy coincided with the historical shift in the balance of power toward those nations and peoples who favored the liberal democratic idea, a shift that began with the triumph of the democratic powers over fascism in World War II and that was followed by a second triumph of the democracies over communism in the Cold War.²⁴

President Obama made the same point in Oslo: “But the world must remember that it was not simply international institutions—not

the United States still has a special role to play in supporting political and economic pluralism around the world

just treaties and declarations—that brought stability to a post-World War II world. Whatever the mistakes we have made, the plain fact is this: The United States of America has helped underwrite global security for more than six decades with the blood of our citizens and the strength of our arms.”²⁵

While trying to graft pluralism to realism, it is vital to avoid thinking that all values are equal. Appiah writes, “Universalism without toleration, it’s clear, turns easily to murder,” and so there are limits to cosmopolitan tolerance. “We will sometimes want to intervene in other places, because what is going on there violates our fundamental principles so deeply. We, too, can see moral error and when it is serious enough—genocide is the uncontroversial case—we will not stop with conversation. Toleration requires a concept of the intolerable.”²⁶ And Kristof quotes Berlin as saying, “I am not a relativist. I do not say, ‘I like my coffee with milk and you like it without; I am in favor of kindness and you prefer concentration camps.’” As Kristof concludes, “Finding the boundary between what can be tolerated with gritted teeth and what is morally intolerable may not be easy, but it does not mean that such a boundary does not exist.”²⁷ This is at the root of the diplomat’s dilemma and why a combination of philosophies speaks to those charged with pursuing America’s interests around the world.

No Room for Wotton

An American diplomat starts her or his career by taking an oath of office to the Constitution of the United States. These officers come to their profession having formed their own values, instincts, and philosophies. But the professional pursuit of diplomacy requires a philosophy of diplomacy and a commitment to an America founded on optimism, a commitment to justice and truth in dealing, and the sobriety described by Niebuhr, complemented by a belief in the pluralism of Berlin and Appiah. In the search for a name for one’s professional credo, perhaps this can be termed “optimistic realism,” the belief that strategic, determined effort can produce results, tempered by a recognition of the limits on where, when, and how fast these results can be achieved.²⁸ Looking back over almost 30 years of service to America as one of its diplomats, this is my attempt to define my motivations and beliefs. Sir Henry Wotton is not my guiding philosopher. **JFQ**

NOTES

¹ Quoted in Sir Ivor Roberts, *Satow’s Diplomatic Practice*, 6th ed. (Oxford: Oxford University Press, 2009), 82.

² John W. O’Malley, *Four Cultures of the West* (Cambridge: Harvard University Press, 2004), 16.

³ Henry Kissinger, *Diplomacy* (New York: Simon and Schuster, 1994), 27–28.

⁴ Theodore Roosevelt, “The Man in the Arena,” speech at the Sorbonne, Paris, France, April 23, 1910.

⁵ Kissinger, 79.

⁶ Marc Grossman, “Supporting Political and Economic Pluralism: A 21st Century Diplomatic Approach,” *American Diplomacy.org*, 2010, available at <www.unc.edu/depts/diplomat/item/2010/0912/comm/grossman_pluralism.html>.

⁷ Harold Nicolson, *Diplomacy* (Oxford: Oxford University Press, 1950), 49, 110.

⁸ Garrett Mattingly, *Renaissance Diplomacy* (New York: Penguin Books, 1964), 35.

⁹ Reinhold Niebuhr, *The Irony of American History* (New York: Charles Scribner’s Sons, 1952; Chicago: University of Chicago Press, 2008); Brian Urquhart, “What You Can Learn from Reinhold Niebuhr,” *New York Review of Books*, March 26, 2009; Robert Kagan, “Power Play,” *The Wall Street Journal*, August 30, 2008, W–1.

¹⁰ Andrew J. Bacevich in Niebuhr, x.

¹¹ Niebuhr, 2–3.

¹² *Ibid.*, 7.

¹³ *Ibid.*, 133.

¹⁴ Barack Obama, remarks by the President at the acceptance of the Nobel Peace Prize, Oslo, Norway, December 10, 2009.

¹⁵ Nicholas Kristof, “On Isaiah Berlin,” *New York Review of Books*, February 25, 2010, 26.

¹⁶ Michael Ignatieff, *Isaiah Berlin: A Life* (New York: Henry Holt, 1998), 286.

¹⁷ Isaiah Berlin, *Liberty*, ed. Henry Hardy (Oxford: Oxford University Press, 2008), 216.

¹⁸ *Ibid.*, 217; Kristof, 26.

¹⁹ Kwame Anthony Appiah, *Cosmopolitanism* (New York: W.W. Norton, 2007), xv.

²⁰ *Ibid.*, 144.

²¹ Niebuhr, 79.

²² *Ibid.*, 143–144.

²³ Robert Kagan, *Dangerous Nation* (New York: Alfred A. Knopf, 2006), 41.

²⁴ Kagan, “Power Play,” W–1.

²⁵ Obama.

²⁶ Appiah, 140–144.

²⁷ Kristof, 26.

²⁸ Grossman.



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Deputy Defense Secretary William J. Lynn III meets with USSOUTHCOM commander and Joint Directors at USSOUTHCOM headquarters

PLANNING IS EVERYTHING

By MARK A. BUCKNAM

On January 31, 2007, just a few weeks after the surprise announcement that Robert Gates would replace Donald Rumsfeld as Secretary of Defense, Secretary Gates was briefed on military plans and the key role envisioned for him in the development of those plans. This was not a detailed briefing of the 50-plus contingency plans then in existence. It was an overview of the planning process itself and an introduction to the 15 or so top priority plans that the Secretary would review in greater detail in the months ahead. At the meeting, Secretary Gates confirmed his commitment to play an active role in the process for developing and reviewing plans. This would be a priority for him. As he saw it, involvement in the planning process was one of his core responsibilities as Secretary—indeed, it is one of the few responsibilities of the Secretary enumerated in Title 10 of the U.S. Code.

In late 2008, after nearly 2 years in his position, Secretary Gates declined a suggestion that he delegate authority to approve some of the lesser priority plans by noting, “Looking at the list, I think it would be a dereliction of my responsibilities to not approve the subject contingency plans.” At the initial plans briefing in early 2007, Secretary Gates also agreed to his briefers’ recommendation to consolidate disparate planning guidance documents, so as to bring greater coherence and consistency between planning for wartime contingencies and planning for Department of Defense (DOD) day-to-day activities around the world. In agreeing to these things, Secretary Gates was furthering an initiative called Adaptive Planning begun by his predecessor. He was also strengthening civilian control of the military.

Whoever replaces Robert Gates as Secretary of Defense must be prepared to immerse himself in the DOD planning process. This article first considers some barriers to the Secretary’s involvement in planning and then looks at the benefits of planning beyond just the production of plans. It next describes how the Adaptive Planning process improves civilian control of the military—bringing military planning into tighter alignment with administration policies and priorities. After explaining the current plan development and review process, the article highlights the vital role that the Secretary plays in the planning process.

Barriers to Involvement

The Secretary of Defense after Dr. Gates will confront a multitude of challenges that will compete for his attention and make it difficult to focus his time and energy on the department’s planning processes. Not least among his concerns will be the ongoing operations in Afghanistan, the wider war against al Qaeda and its affiliates, and coping with America’s worldwide commitments in an era of declining defense budgets. Other challenges will include unpredictable natural disasters, such as the earthquakes and tsunamis that have devastated Indonesia, Haiti, and Japan in recent years, and manmade



DOD (Armando Carrasco)

crises, such as the political revolutions that have roiled the Middle East in 2011. If recent history is a reliable guide, the next Secretary will also be forced to contend with stories questioning the loyalty of top military leaders and with media storms over the state of civil-military relations in America. Indeed, the breadth and depth of responsibilities that go with running the world’s largest and most powerful bureaucracy are so vast that the job has been described as “nearly impossible.”¹ As one former Secretary explained, “The list of secretarial responsibilities is so imposing that no single individual can totally fulfill them all.”² Gates’s successor will have to choose carefully the areas that he will want to focus his attention on, and then work to stay focused on them.

Regardless of the background, talents, and expertise with which the next Defense Secretary enters office, certain aspects of military planning will seem unnatural and arcane. It will seem unnatural because military planning includes planning not only for operations one intends to conduct, but also for those things one hopes never to do. Even long-serving foreign policy professionals sometimes fail to grasp this aspect of military planning and assume that the existence of a plan indicates an intent or desire to execute that plan. Such thinking is not unreasonable. Human success, even survival, depends on efficiency—that is, on not wasting time and energy on unnecessary things. No mentally sound person would

the responsibilities that go with running the world’s largest and most powerful bureaucracy are so vast that the job has been described as “nearly impossible”

hire an architect to design a high-rise office building, obtain building permits, retain lawyers to draw up contracts, and advertise for tenants if that person had no intent to build. Yet the U.S. military routinely devotes enormous amounts of time and energy to detailed planning for contingencies that are unlikely, and that the U.S. Government also energetically strives to prevent.³

Military planning will seem arcane to the new Secretary because it *is* arcane. Even within the military, the detailed workings of military planners remain relatively obscure—part science and procedure, and part art. It is the product of specialized training, education, and experience. Furthermore, as with any professional subspecialty, planning has its own language. Perfectly ordinary words, such as *assumption* and *supported*, have very precise meanings for military planners; and many uniformed officers who have not been planners themselves have enjoyed full and successful careers without mastering the nuances of “planner-speak.” Finally, military

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Members of 10 participating militaries review terrain model during planning for exercises Partnership of the Americas 2010 and Southern Exchange 2010



Peruvian Naval Infantry

contingency plans are tightly controlled. Access to them is restricted to those individuals in DOD and in other executive branch agencies with a strict need-to-know caveat. Little wonder, then, that senior civilian policymakers forced into contact with military planning often struggle to achieve some level of comfort with their roles in the planning process. Notwithstanding these obstacles, the Secretary of Defense plays a vital role in ensuring that DOD realizes the significant benefits that come from planning.

Benefits Beyond Plans

Military planning is a necessary endeavor if the President of the United States is to have realistic options from which to choose in time of military crisis. Indeed, the mantra of civilian policymakers in the Pentagon responsible for planning is “options for the President.” Planners commit the unnatural act of pouring huge amounts of time and energy into planning for the unlikely and undesired, so that the President and his senior advisors will have plans for dealing with crises that require a military response should such

crises erupt. This is not to suggest that any plan should ever be executed as written. No plan survives beyond first contact with reality, to paraphrase the 19th-century Prussian Field Marshal Helmut von Moltke.⁴ The point is that the mere act of planning is valuable for its own sake, and not just for the plans that result from it. Indeed, President Dwight Eisenhower, who served as head of the Army’s War Plans Division during the early months of World War II, is well known within military circles for proclaiming that “plans are worthless, but planning is everything.”⁵

Planning—especially when it is conducted according to the DOD Adaptive Planning process—is valuable for several important reasons. First, planning compels interaction among military planners throughout DOD, and between those military planners and the staffs that support policymakers in the Pentagon. By strengthening the networks connecting these officials, DOD is better prepared to deal with other related operational and policy challenges, not just the challenges associated with specific plans. Second, planning is valuable because it

requires senior military officers in the combatant commands to engage in discussions of strategy and policy with senior Pentagon policymakers. Discussions of strategy among senior uniformed leaders and civilian policymakers are rare, and without the right sort of planning process, they would be rarer still. These strategic discussions enable planners and policymakers alike to examine U.S. foreign policy and plans, and to explore a plan’s underlying assumptions, objectives, options, opportunities, risks, and myriad other factors. Such discussions lead not only to better plans, but also, often, to better policies. Third, in the development and review of a plan, a wide range of DOD officials will have a chance to scrutinize a plan and improve it. Although access to plans is tightly controlled, the major components of DOD (for example, the Services, combatant commands, certain agencies, and the Joint Staff) have specially designated planners whose job it is to review and comment on top priority plans. Fourth, the planning process creates opportunities for military planners to work with their counterparts in other departments

and agencies of the executive branch, thereby helping to ensure that the benefits cited above spread beyond DOD.

Adaptive Planning

The Adaptive Planning initiative, as it has evolved under Secretary Gates, has gone a long way toward realizing the four benefits just described and rectifying deficiencies in the DOD planning processes that existed prior to the Goldwater-Nichols Department of Defense Reorganization Act of 1986.⁶ Before Goldwater-Nichols, civilian policymakers did not participate in the plan development and review process. Then, as now, military plans were built by combatant commanders—the four-star officers who report directly to the Secretary and President and who are responsible for geographic or functional commands (for example, U.S. Central Command and U.S. Strategic Command). However, before Goldwater-Nichols, the Secretary of Defense was the only DOD civilian who got to see military plans, and that was after the plans had been finalized and approved by the Joint Chiefs of Staff.⁷

Goldwater-Nichols provided a sound legal basis for ensuring greater civilian involvement in military planning. The law gave the Secretary the statutory authority and responsibility to “provide to the Chairman [of the Joint Chiefs of Staff] written policy guidance for the preparation and review of contingency plans.”⁸ By law, the Secretary’s guidance is to be approved by the President, and the Chairman adds his own strategic direction in a separate guidance document. To aid the Secretary in discharging his responsibilities, the Under Secretary of Defense for Policy was tasked with assisting “the Secretary of Defense in preparing written policy guidance for the preparation and review of contingency plans; and in reviewing such plans.”⁹ The changes to DOD planning procedures wrought by Goldwater-Nichols were not self-implementing, and throughout the 1990s, the Secretary’s staff struggled to attain the larger role for civilian policymakers envisioned by Congress when it crafted the law.

The Adaptive Planning initiative has steadily strengthened the hand of civilian policymakers in the military planning process and has kept plans more up to date and relevant to the ever-changing security environment. The Secretary of Defense’s personal involvement in the process of developing and reviewing plans has been the cornerstone

of Adaptive Planning, and can safely be credited for recent major improvements in DOD campaign and contingency planning. Secretary Gates’s predecessor, Donald Rumsfeld, formally launched the Adaptive Planning initiative in 2003 to get the military to produce better plans more quickly¹⁰—though the impetus for the initiative could be traced back even further, to Rumsfeld’s intense dissatisfaction with his minuscule role in the development of plans, and with the slow pace of military planning after the terrorist attacks of September 11, 2001.

By 2005, despite significant resistance within the bureaucracy, DOD began in earnest to implement Adaptive Planning. First and foremost among the “essential elements of Adaptive Planning” was the imperative for “clear strategic guidance and frequent dialogue.”¹¹ The new planning process would “feature detailed planning guidance and frequent dialogue between senior leaders and planners to promote a common understanding of planning assumptions, considerations, risks, courses of action, implementing actions, and other key factors.”¹² Although the initiative was designed to yield other improvements, the interactive and iterative engagement between senior policymakers and military planners was the most important of them all. Without the Secretary’s involvement, combatant commanders and senior civilian policymakers would devote far less time and attention to plans than they do today, resulting in a concomitant lessening of interest among their subordinates, and an overall diminution in the quality of plans and benefits derived from the planning process.

Consolidating Guidance

As noted in the opening paragraph, Secretary Gates gave the go-ahead early in 2007 to consolidate policy documents so as to bring greater coherence to the guidance and planning for DOD worldwide, day-to-day activities and the guidance and planning for contingency operations. Following the terrorist attacks of September 11, the White House and Pentagon generated a bewildering tangle of strategy and guidance documents

without any clear articulation of which guidance trumped which, or how consumers of the guidance should prioritize among the disparate signals sent from Washington. In 2008, with Secretary Gates’s approval, Pentagon officials promulgated one overarching policy document to guide planning for employment of forces—for both actual employment (planning for worldwide, day-to-day activities) and potential employment (planning for contingencies). The rationale underpinning the new consolidated guidance stipulated that all planning started at the top, with the President’s priorities, as established in the National Security Strategy. From there, the Secretary of Defense’s staff would lead efforts to devise a National Defense Strategy, while the Chairman’s staff spearheaded production of a National Military Strategy. Although each subordinate strategy added somewhat greater specificity to guide the combatant commanders in implementing the National Security Strategy, all three documents remained couched in high-level terms and were of limited use to DOD military planners. The new consolidated planning guidance of 2008 provided the details combatant commanders needed to prioritize their efforts and to write their own regional or functional strategies. The combatant commanders’ strategies were in turn implemented through campaign plans drawn up by their staffs. Those campaign plans implemented strategies mainly designed to prevent crisis and conflict—in accordance with the National Security Strategy goals. But campaign plans also helped prepare the way for success in conflict if prevention efforts failed—consistent with the guidance for contingency planning approved by the President.

The Plan Review Process

Secretary Gates’s consistent involvement in the planning process helped to ensure that policy and strategy guided the bureaucracy—particularly the uniformed military planners within it—and not vice versa. But how does the Secretary get involved? What is the plan development and review process? The best one-word description of the process is *iterative*. For a new plan, a combatant commander

the new consolidated planning guidance of 2008 provided the details combatant commanders needed to prioritize their efforts and to write their own regional or functional strategies

Officers from U.S., Central, and South American forces meet at planning exercise for PANAMAX 2010



U.S. Navy (Brian Goodwin)

would go through three different reviews with the Secretary of Defense. Ideally, those in-progress reviews (IPRs) would be spread over a 6-month period, though it often took 12 to 18 months to get through all three IPRs with the Secretary.¹³ The first review would cover the mission analysis, where the challenge or problem to be addressed would be clearly defined and agreed upon. This first stage would examine political endstates, military objectives, assumptions, threats and opportunities, and a mission statement for a given scenario or problem. The second IPR would address concepts for meeting the challenge or solving the problem that had been defined in the first IPR. Finally, the third IPR would examine the fully developed plan, risks to the plan, and steps needed to pave the way toward successful implementation of the plan. Once a plan was approved, it would be scheduled for annual reviews that would include detailed assessments of the plan and the strategic assumptions upon which it was built. For relatively straightforward plans, the first two IPRs might be combined into a single session with the Secretary, whereas new and conceptually complex plans, such as the one dealing with cyberspace operations, might require an extra IPR or two to obtain the Secretary's final approval.

At each stage of plan development, there would be preliminary briefings and staffing procedures that had to be completed before a combatant commander would be scheduled to sit down to brief the Secretary. Plans going to the Secretary would first be briefed within the Secretary's staff—the Office of the Secretary of Defense (OSD)—to the Deputy Assistant Secretaries of Defense (DASDs) whose policy portfolios included the challenge or problem addressed by the plan. Ideally, a revised version of the briefing would then go to the Under Secretary of Defense for Policy a few weeks after the briefing to the DASDs. If all went well in the briefing to the Under Secretary, the combatant commander would conduct an IPR with the Secretary a few weeks later. The prebriefings would normally be conducted by the two-star director for Strategic Plans and Policy—the J5, in military parlance—from the combatant command responsible for the plan in question; for prebriefings to the Under Secretary of Defense for Policy, it was not uncommon for a combatant commander or his three-star deputy to attend. At the Pentagon, the DASD for Plans would oversee the process for OSD, and would invite to the initial briefings those regional or functional DASDs with responsibilities for policy areas affected by a given plan. At these

DASD-level prebriefings, action officers in OSD who possessed intimate familiarity with the plans and with associated U.S. Government policy would arm the DASDs with tough questions designed to ensure that the combatant commands were fully compliant with policy guidance given to them. The questions during these prebriefs would also be intended to highlight for the military planners those aspects of a plan that OSD officials believed needed refinement before the plan would be deemed ready to be briefed to the Secretary of Defense. These same OSD action officers would also be responsible for preparing the “read-ahead” materials for the Under Secretary and Secretary.

Smart planners would welcome the first level of prebriefings as a means for improving their briefings and associated plans; it was much easier to accept constructive criticism at this level than to see their four-star bosses squirm when the Under Secretary of Defense for Policy or the Secretary himself demanded answers to the same tough questions. Not all planners perceived this advantage. In 2009, one particularly recalcitrant two-star complained to the DASD for Plans on a video teleconference, with staff members present on both sides, that he (the two-star) did not see any benefit to the prebriefing—in essence challenging the civilian DASD to justify the Secretary's planning process to the combatant command staff's satisfaction. Putting aside the inappropriate way in which the point was raised, the two-star's question betrayed a stunning lack of appreciation for the DASDs' ability to provide the planners with insights into the Secretary's thinking and his likely concerns. Moreover, the question incorrectly presupposed that the prebriefing process was meant solely to aid the combatant command planners, entirely missing the point that the vetting process was also meant to serve the needs of the Secretary of Defense.

Through prebriefings, the staffs often cleared up confusion, corrected flawed assumptions, clarified key issues, and analyzed realistic options for dealing with those issues, thereby enabling the Secretary to engage in more substantive discussions during a plan review with a combatant commander—focusing on matters that could only be decided at their level. Absent the prebriefing process, the Secretary's time would often be wasted on matters that should have been settled by the DASDs or the Under Secretary for Policy, or time would be wasted

prebriefings educate policymakers by making clear the true feasibility (or infeasibility) and likely costs of preferred policy options

in muddling through sterile discussions of complex issues that should have been thought through and clarified by the staffs. In several instances, the prebriefings educated policymakers by making clear the true feasibility (or infeasibility) and likely costs of preferred policy options. Thus, the prebriefing process has tended to improve policymaking as well as plans, and most combatant commands have slowly come to see the process as value-added for themselves, rather than as mere bureaucratic hoop-jumping.

The plan review process, including the prebriefings, comprises a fundamental aspect of civilian control of the military. *Civilian control*, as the term is used here, involves more than just ensuring military respect for civilian authority and compliance with the orders of the President and Secretary—those aspects of civilian control are not in doubt. Civilian control also includes making sure military leaders understand and adhere to the priorities and policies of the administration and that military planning reflects those priorities and policies. No Secretary of Defense is likely to ever read an entire theater campaign plan or operation plan—typically amounting to hundreds of pages of written text. But the action officers who work directly for the DASDs will. That is why the Under Secretary of Defense for Policy was given a statutory role under Goldwater-Nichols legislation to assist the Secretary in producing the guidance for, and in the development and review of, contingency plans. Indeed, the Obama administration populated the key positions in OSD Policy with political appointees who were seasoned policymakers with previous tours in the Pentagon. The Honorable Michèle Flournoy, James Miller, and Kathleen Hicks filled the top strata in the Policy hierarchy responsible for plans. All had previously served in OSD Policy leadership positions with responsibilities for plans or were closely associated with the planning process. With the transition to the Obama administration, OSD also created a new position—the DASD for Plans—highlighting the increased

importance these policymakers ascribed to planning. Janine Davidson, another veteran of OSD Policy and a former U.S. Air Force pilot, has held that position since its creation. Since early 2009, then, DOD has had a civilian political appointee whose order of precedence ranks above Active-duty two-star officers, and whose primary responsibility is to focus on the development and review of plans. The next Secretary of Defense will thus inherit an organization and a process designed to enable effective civilian involvement in and direction of military planning.

Vital Role of the Secretary

For the Adaptive Planning processes to work, the Secretary and those who manage his calendar must support the OSD staff in fulfilling its role, and enforce the review process that goes first through the DASD for Plans, then the Under Secretary of Defense for Policy, before reaching the Secretary. Otherwise, combatant commanders and their planners would almost certainly revert to developing plans with little or no input from civilian policymakers and attempt to go straight to the Secretary for approval. Secretary Rumsfeld and his senior staff assistants were wont to allow combatant commanders to effectively bypass the OSD staff, particularly with combatant commanders who were known to be the Secretary's close confidants. This would at times result in a situation where no one from the OSD staff who had actually read the plan in question, and who had significant expertise on the policies and issues relevant to the plan, was able to know the content of the commander's IPR briefing in time to adequately prepare the Secretary. Nor were these OSD experts always allowed to attend the actual review sessions—the IPRs—with the Secretary and the combatant commanders. This absence made it impossible for the experts on the Secretary's staff to faithfully follow up on his tasks, questions, or decisions. In short, this lax enforcement of the plan review process allowed certain combatant commanders to control the process and to sidestep difficult issues. For example, DOD plans for counterinsurgency weapons of mass destruction stagnated for most of 2007, after experts on the OSD staff were unable to adequately participate in the preparation for an IPR with Secretary Rumsfeld in late 2006.

With Secretary Gates, the practice of end-running the OSD staff came to an end, and no plan review could be placed on the

Secretary's calendar unless the DASD for Plans confirmed that the plan was ready to go to the Secretary. On several occasions during Secretary Gates's tenure, IPRs were cancelled when a combatant command attempted to bypass the prebriefings to the DASDs or to the Under Secretary for Policy. Similarly, IPRs with the Secretary would fall from his calendar when combatant commands attempted to put off the prebriefings until just a few days before the briefing to the Secretary, making it impossible for the commands to incorporate policy guidance or make needed changes in their briefings—a practice that subverted the intent of the prebriefings while appearing to adhere to the IPR process. More than one IPR was cancelled when a combatant commander attempted to change the purpose of the meeting or substitute a different briefing in lieu of the one that had been scheduled.

To his credit, Secretary Gates and his administrative staff did a much better job than Gates's predecessor at enforcing deadlines for the combatant commands to provide briefing materials prior to plan reviews. Gates had a widely held reputation for reading everything that his staff provided him, and he came to the IPRs well prepared to discuss the plans. Moreover, Secretary Gates was impatient with any general or flag officer who attempted during an IPR to introduce new or updated briefing materials that had not been vetted by the OSD staff. If a combatant commander produced a document at an IPR for the Secretary to sign, Dr. Gates would look to his Under Secretary for Policy, in effect asking why it was not part of his read-ahead material. A disapproving look from the Under Secretary would settle the matter, and Secretary Gates would leave the paper on the table, unacknowledged and unsigned. That happened more than once, despite warnings from senior uniformed and civilian officials in the Pentagon to the combatant commands to avoid the practice.

The ability of certain combatant commanders to evade strategic discussions with their boss and to avoid difficult issues during Secretary Rumsfeld's tenure, and the more rigorous implementation of Rumsfeld's Adaptive Planning procedures under Secretary Gates, highlights an important point: very few people can tell a combatant commander what to do. Though the Chairman of the Joint Chiefs of Staff and the Under Secretary of Defense for Policy stand higher in the pecking order than combatant commanders, they are not

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Optimizing Africa's Security Force Structures
by Helmoed Heitman

The author, a correspondent for *Jane's Defence Weekly* and a retired officer of the South African Army, contends that African security forces must be able to counter and defeat a variety of experienced, highly mobile, and well-armed irregular forces that are closely embedded in local communities. If African forces are to be accepted by local populations—whose support is indispensable to defeating irregular fighters—they must be demonstrably competent and professional. The author describes the types of balanced general purpose forces that are key to effective force design—such as the modular battalion, the battalion group, specialized forces, and airpower—and that are capable of conducting independent operations over the wide expanses of African territory.



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SPECIAL FEATURE | Planning is Everything

in the chain of command. Only the Secretary of Defense and the President can technically order combatant commanders to do anything. That is why the Secretary's involvement in the planning process and his support for his own staff in enforcing that process are so vital. One example illustrates the point well. Throughout 2007 and much of 2008, U.S. Central Command refused to bring plans to the Pentagon, despite the importuning of Pentagon officials of three- and four-star rank—both uniformed and civilian. More than one staff officer in the Pentagon has speculated that one factor in Admiral William Fallon's abrupt and premature departure in March 2008 as commander of U.S. Central Command might well have been that the admiral refused to bring plans through the OSD staff to the Secretary of Defense—a failing he was known for in his earlier capacity as commander of U.S. Pacific Command. Combatant commanders can get away with such behavior for a while, for no Secretary will be eager to expend the time and political capital necessary to rein in a wayward four-star commander. But any Secretary who wishes to manage the planning process to ensure that the President has options in times of crises—even if they are the "least worst" options for dealing with situations that all would rather avoid—must be willing to engage in the planning process and see to it that difficult policy issues get addressed as far as possible in the development and review of plans. In short, without Secretary Gates's involvement in the planning process, and his enforcement of the process for reviewing plans, the combatant commands would have been held to much lower standards of planning and thinking. Moreover, there would have been much less interaction among the staffs of the various organizations with stakes in the plans, and that would have redounded to the detriment of those plans and the DOD ability to cope with crises.

The iterative plan development and review process that exists today under Adaptive Planning represents a significant improvement over pre-Goldwater-Nichols practices and over the practices of the 1990s and early 2000s, but it cannot succeed without the Secretary of Defense's support and enforcement of the process. It would be easier for combatant command planners, and worse for U.S. national security, if the Secretary did not take such an interest in planning. Only if the next Secretary commits to being an active and engaged participant in the plan-

ning process will these hard-won improvements become institutionalized and further improvements accrue. **JFQ**

NOTES

¹ Charles A. Stevenson, *SECDEF: The Nearly Impossible Job of Secretary of Defense* (Washington, DC: Potomac Books, 2006), 3.

² The citation appears in Stevenson, where it is attributed to James Schlesinger, "The Office of Secretary of Defense," in *Reorganizing America's Defense: Leadership in War and Peace*, ed. Robert Art, Vincent Davis, and Samuel P. Huntington (Washington, DC: Pergamon-Brassey's, 1985), 262.

³ The advent of disaster response planning conducted by the Department of Homeland Security (DHS) comes closest to matching the level of planning done by DOD, and was in fact modeled on the DOD planning system. However, DHS plans are not yet sufficiently detailed and complete to be on par with the most detailed DOD plans.

⁴ Daniel J. Hughes, ed., *Moltke on the Art of War: Selected Writings* (Novato, CA: Presidio Press, 1993), 45.

⁵ Dwight D. Eisenhower, "Remarks at the National Defense Executive Reserve Conference," November 14, 1957, available at <www.presidency.ucsb.edu/ws/index.php?pid=10951>.

⁶ Senate Committee on Armed Services, *Defense Organization: The Need for Change: Staff Report to the Committee on Armed Services*, 99th Cong., 1st sess., Committee Print, S. Prt. 99-86, October 16, 1985, 184-187, referenced in James R. Locher III, *Victory on the Potomac: The Goldwater-Nichols Act Unifies the Pentagon* (College Station: Texas A&M University Press, 2002), 303. See also James R. Locher III, "Has It Worked? The Goldwater-Nichols Reorganization Act," *Air Power Journal* 1, no. 2 (Winter 2006), 171.

⁷ Locher, "Has it Worked?" 171.

⁸ 10 United States Code (USC), Section 113, paragraph g. (2).

⁹ 10 USC, Section 134, paragraph a. (2)(A) and (B).

¹⁰ Adaptive Planning Memorandum, Ryan Henry, Principal Deputy Secretary of Defense for Policy, August 26, 2003, cited in *Adaptive Planning Roadmap 2005* (Washington, DC: DOD, 2005), 3.

¹¹ *Adaptive Planning Roadmap 2005*, 7.

¹² *Ibid.*

¹³ The Secretary's availability has rarely been a factor in these delays. For operations plans, the delays in planning have been due in no small part to DOD failure to field appropriate information technology to assist military planners.

Marines patrol in Garmsir district of
Helmand Province, Afghanistan

On **Military Theory**

By MILAN VEGO

All too often, the critical importance of military theory either is not well understood or is completely ignored by many officers. A reason for this is their apparent lack of knowledge and understanding of the relationship between theory and practice and the real purpose of military theory. Many officers are also contemptuous of theory because they overemphasize the importance of technology.¹



U.S. Marine Corps (Colby Brown)

DOD



General Dwight D. Eisenhower and General "Hap" Arnold discuss Allied progress during World War II

What Is Military Theory?

In generic terms, a *theory* can be described as a coherent group of general propositions used to explain a given class or phenomenon.² It is a precise consideration of a subject to obtain fundamental knowledge. It is the teaching of the truth or development of the truth of a subject.³ In the scientific sense, a theory does not need to be supported or contradicted by evidence. In addition, it does not necessarily mean that the scientific community accepts a given theory.⁴

In the broad definition of the term, *military theory* can be described as a comprehensive analysis of all the aspects of warfare, its patterns and inner structure, and the mutual relationships of its various components/elements. It also encapsulates political, economic, and social relationships within a society and among the societies that create a conflict and lead to a war. Sound military theory explains how to conduct and win a war. It also includes the use of military force to prevent the outbreak of war.⁵

Military theories are differentiated according to their purpose and scope. General theories of war deal with war as

a whole, regardless of purpose and scale. There are also military theories focused on specific types of hostilities and the use of military force such as insurgency and counterinsurgency, terrorism, support of foreign policy, and peace operations. Theories of land, naval, and air warfare are intended to explain the nature, character, and characteristics of war in each physical medium. Theories of military art and of strategy, operational warfare (or operational art), and tactics are focused on explaining, respectively, the methods, planning, preparation, and execution of actions aimed to accomplish military objectives. Each of these theories also describes the inner structure and mutual relationships of the elements of warfare in the respective fields of study. In addition, they have to describe a larger strategic or operational framework.

Clausewitz recognized that every age had its own kind of war.⁶ A new theory of war emerges as a result of a combination of drastic changes in the international security environment, diplomacy, domestic politics, ideology, economics, and revolutionary advances in technology. For example, a new theory of war was developed in the aftermath of the French Revolution and the Napoleonic Wars, World War I, and World War II.

Purpose and Importance

Carl von Clausewitz wrote that the primary aim of any theory is to clarify concepts and ideas that have become confused and entangled. Only after terms and concepts have been defined can one hope to make any progress in examining a question clearly and simply and expect the reader to share one's view.⁷ Clausewitz believed that the main purpose of theory is to cast a steady light on all phenomena. It should show how one thing is related to another and keep important and unimportant elements separate.⁸

The purpose of theory is not to provide rules and regulations for action—to prescribe a certain road that an officer should follow.⁹ Military theory should develop a way of thinking rather than prescribe rules of war. Clausewitz wrote that military theory is most valuable when it is used to analyze and critically assess all the components and elements of warfare. It then becomes a guide for anyone who wants to read about war. Theory prevents one from having to start fresh each time, plowing through material and then sorting out the pertinent details.¹⁰

A sound military theory is essential both for an understanding of past wars and for the successful conduct of a future war.¹¹ It provides the badly needed broader and deeper framework for understanding the entire spectrum of warfare. The lack of an accepted body of theory leaves a void in the basic philosophy that should guide people in distinguishing between cause and effect, trivial and important, and peripheral and central.¹² Even an imperfect or incomplete theory can clarify many obscure matters.¹³ Military theory deepens and clarifies one's understanding of various concepts and ideas on the conduct of war. It serves as a guide in obtaining proper understanding of warfare in all its aspects. One of the most important practical values of a sound military theory is to assist a capable officer in acquiring a

military theory is most valuable when it is used to analyze and critically assess all the components and elements of warfare

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broader outlook of all aspects of warfare. The commander armed with solid theoretical knowledge would have a firmer grasp of the sudden change of a situation and could act with greater certainty and quickness to obtain an advantage over the opponent than the commander who lacks that knowledge. Another value of having a sound military theory is that it provides major input to a valid tactical and service-wide doctrine. At the same time, a comprehensive knowledge and understanding of military theory should help an officer to appreciate strengths and weakness of military doctrine.

Science-Philosophy-Military Theory Nexus

In the past, military theories were usually based on the dominant science of the age in which a military theoretician lived. This is not necessarily the case in the modern era because of the proliferation of various scientific theories and their interpretation by many philosophers. Some of the new sciences and philosophies are based on dubious premises or are in fact pseudosciences.

Modern military theory was heavily influenced by empiricism and determinism. *Empiricism* is described as a logical process based on pursuing knowledge through observation and experiments. One can make sensible, if restricted, deductions and then check them by reference to observed facts. This, in turn, puts great emphasis on observation and historical study.¹⁴ *Determinism* requires that events occur in accordance to

some fundamental laws (that is, predictable). There is overwhelming evidence that the universe is in fact determined. Yet the course of war and its outcome are by no means predetermined. One cannot realistically search for and find certainty in a war. Hence, any philosophy based on determinism is of limited value in the conduct of war.¹⁵

The two main scientific methods are inductivism and deductivism. *Inductivism* is described as a method of reasoning by which one proceeds from specific observations to make general conclusions. The main idea behind *deductivism* is to proceed from the general to the specific. Theory is developed by deductively testing data. Sir Isaac Newton was the first to use both inductivism and deductivism as scientific methods. For Newton, one started with a hypothesis and then deduced what one would expect to find in the empirical world because of that hypothesis—hence the name *hypothetical deductivism*. This method requires rigorous proof because one cannot be sure that all data were examined. There is always the possibility that an observation could conflict with a known scientific law. Every theory has an infinite number of expected empirical outcomes. Not all of them can be tested. But even if a theory can be proven to some extent by empirical data, it can never be conclusively confirmed.¹⁶

The ideas of military theoreticians have never developed in a vacuum but rather have been products of a complex interplay of the scientific, philosophical, and social influences of a given era. The ideas of

military theoreticians are also affected by major political and military events of their eras. For example, Henri Antoine de Jomini was influenced by Newtonian scientific ideas in developing his theory of war.¹⁷ He believed that war, like other fields of nature and human activity, was susceptible to a comprehensive and systematic theoretical study. Jomini argued that war in part could be reduced to rules and principles of universal validity and possibly even mathematical certainty for which Newtonian mechanics set the example. Yet he also recognized that like art, war is also partly in flux, constantly changing, dependent on circumstances, affected by unforeseen and incalculable events, and always requiring application through the general genius.¹⁸

To understand Clausewitz's theory of war, it is necessary to examine significant political and military events of his era and philosophical and scientific debates of the early 19th century.¹⁹ Philosophical trends of the era of Enlightenment shaped the ideas of Clausewitz.²⁰ He was also influenced by the French Revolution and the Napoleonic Wars.²¹ Clausewitz was especially influenced by the ideas of the German Romantic Movement embodied in Immanuel Kant.²²

J.F.C. Fuller was greatly influenced by well-known philosopher and Darwinian Herbert Spencer. He wrote *The Foundations of the Science of War* and *The Reformation of War* in response to what he saw as a failure of military theory in World War I.²³ Spencer's vision of an orderly, deterministic universe led Fuller to think that war is a



Sir Isaac Newton by John Georg Brucker



Maurice de Saxe by Maurice Quentin de La Tour



Gerhard Johann von Scharnhorst by Friedrich Bury

complexity is caused not by the number of parts within a system but by the interactive and dynamic nature of the system

science. Consequently, there must be certain laws or principles of war, just as there are laws of chemistry, physics, and psychology.²⁴

Methods developed by Sir Francis Bacon and Newton were used in science for about 300 years.²⁵ The Newtonian science dominated Western civilization both as a framework for scientific investigation and as an idea that the universe was ordered, mechanistic, and predictable. Two major scientific developments in the early 20th century were Albert Einstein's theories of relativity and quantum mechanics, which was developed by a group of young European physicists led by the Danish physicist Niels Bohr. These new developments replaced the Newtonian idea of cause and effect with a world of probability and trend. They showed that our understanding of the universe will always be incomplete and tenuous.²⁶

The theories of relativity and quantum physics had major influences on the development of modern military theory. Both redefined the factors of time, space, matter, and force. Quantum mechanics has shown that uncertainty cannot be eliminated but only managed by observation. In contrast to the Newtonian science where repeated observations have to be made to reduce uncertainty, quantum mechanics requires multiple observations within short spans of time to reduce uncertainty to the smallest possible level. The theory of relativity implies that multiple observations must be compared with each other to obtain a better understanding of the phenomena.²⁷

Systems theory was developed in the early 20th century in response to the supposed inadequacies of Newtonian science in the new era.²⁸ A system²⁹ exists when a set of elements is interconnected so that changes in one element or its relationship with others result in changes elsewhere, and the entire system exhibits properties and behaviors different from the parts.³⁰ The main types of systems are open and closed. An open system continuously interacts with its environment. Depending on the type of system, these interactions can be in the form of material transfers, energy, or information. The opposite of the open system is the closed or isolated system. Systems can be dynamic

or nondynamic. A dynamic system exhibits a change in response over time due to input, force, information, or energy. A dynamic system can be conservative or dissipative. A conservative dynamic system does not lose energy from friction, while a dissipative dynamic system does.³¹

Since the 1960s, complexity theory has gradually emerged. Its supposed aim is to unify aspects of the universe that escaped due to both Newtonian science and quantum mechanics. Complexity theory describes the behavior of complex adaptive systems.³² Its roots are systems theory and so-called chaos theory.³³ A complex system is any system composed of numerous parts or agents, each of which must act individually according to its own circumstances and requirements, but which by so acting has a global effect, which simultaneously changes the circumstances and requirements affecting all other agents. Complexity is caused not by the number of parts within a system but by the interactive and dynamic nature of the system.³⁴ Complexity theory explains why certain complex adaptive systems that appear to operate close to the realm of chaos are not chaotic and why the second law of thermodynamics did not appear to apply to biology.³⁵

Since the mid-1990s, the systems (or systemic) approach to warfare emerged as the dominant school of thought in the U.S. military, the North Atlantic Treaty Organization, and most other Western militaries. This was exemplified by the wide and almost uncritical acceptance, by not only the U.S. but also other militaries, of numerous proponents' claims of the supposedly enormous benefits of adopting network-centric warfare (NCW), effects-based operations (EBO), systemic operational design (SOD), and its most recent evolution, design.

Despite the claims to the contrary by systems proponents, Clausewitz was not a proponent of the systems approach to warfare—just the opposite. In *On War*, he wrote:

Efforts were therefore made to equip the conduct of war with principles, rules, or even systems [emphasis added]. This did present a positive purpose, but people failed to take

an adequate account of the endless complexities involved. As we have seen the conduct of war branches out in almost all directions and has no definite limits; while any system, any model has the finite nature of a synthesis. An irreconcilable conflict exists between this type of theory and actual practice. . . . [These attempts] aim at fixed values but in war everything is uncertain and calculations have to be made with variable quantities. They direct the inquiry exclusively toward physical quantities, whereas all military action is entwined with psychological forces and effects. They consider only unilateral action, whereas war consists of continuous interaction of opposites. Thus, an irreconcilable conflict exists between this type of theory and actual practice.³⁶

The Process

The reality of war is a starting point for the development of a military theory. Practice, in turn, puts military theory under a searching examination.³⁷ Prussian General Gerhard von Scharnhorst said that the theory of scientific evaluation should be based on experiences. He highlighted the mutual relationship between theory and practice. For him, there was no progress by just having bland experiences without theoretical education and analysis.³⁸ The process of developing a military theory is usually very long. It sometimes takes decades or even longer before a general consensus is reached about changes in the character of war. Some of the strongest and most enduring influences in creating a new theory of war are the works of military theoreticians, as the examples of Clausewitz, Jomini, J.F.C. Fuller, B.H. Liddell Hart, Aleksandr A. Svechin, Alfred T. Mahan, Julian S. Corbett, Raul Castex, Giulio Douhet, and William "Billy" Mitchell illustrate.

Clausewitz wrote that in the process of developing military theory, war has to be divided into related activities. Combat is essentially the expression of hostile feelings. In addition, large-scale combat is a war where hostile feelings often become hostile intentions. Modern wars are seldom fought without hatred between nations. Hence, theory becomes infinitely more difficult as soon as it touches the realm of moral values.³⁹ In general, the more physical the activity in a war, the less difficulty there will be in developing a theory. The more activity becomes intellectual and turns into motives that exercise a determining influence on the

U.S. commander and Iraqi police chief discuss joint operation between Department of Border Enforcement and Iraqi army at the regional level, Basra, Iraq, October 2010



U.S. Army (James Benjamin)

commander, the more difficult developing a sound theory becomes.⁴⁰ A clear distinction should be made between what is important and what is unimportant or even trivial.

The history of warfare is the very foundation of military theory. Military/naval history is inherently broader, deeper, and more diverse than the study of any other area of human activity.⁴¹ It encompasses every aspect of the experience of humanity.⁴² Its value transcends national, ethnic, or religious boundaries. It is the record of universal experience.⁴³ Historical events are an integral part of complex and highly dynamic interrelationships between humans and machines of war. History does not and cannot predict the future. However, it can teach us not to repeat the errors and blunders of our predecessors.

When developing a military theory, as many wars, campaigns, and major operations as possible should be studied. Despite

the passage of time, there are lessons to be identified or learned by studying wars of the ancient era. Obviously, the most valuable area of studies is wars in the modern era. Yet recent wars should be studied with a great deal of caution because most of the pertinent information is lacking. Also, it takes some time to evaluate recent events in a proper light. Not only military, but also political, diplomatic, economic, and social history should be studied as well. Wars are never fought in a vacuum but are an integral part of the general history of an era.

Study of military/naval history is barren and lifeless without the use of historical examples. Theoretical discussion is easily misunderstood or not understood at all without the use of empirical evidence. A certain aspect of military theory is derived from the analysis of many wars, campaigns, and major operations. Then, selected exam-

ples should be used to clarify or illustrate that particular aspect of war. Historical examples can be used as an explanation or application of an idea or to support a certain theoretical statement or construct.⁴⁴ A historical example provides the broader context in which an event occurred.

There are also dangers in selectively using examples from military history. Sources for a particular example might be misleading or even utterly false. Clausewitz warned that improper use of historical examples by theorists normally not only

theoretical discussion is easily misunderstood or not understood at all without the use of empirical evidence

leaves the reader dissatisfied but even insults his intelligence.⁴⁵ German general and theoretician Hans Bronsart von Schellendorf observed that it is well known that “military history, when superficially studied, will furnish arguments in support of any theory or opinion.”⁴⁶

The study of military history would be incomplete if not accompanied by deduction of the lessons learned. In terms of their scale and importance, lessons learned can be technological, tactical, operational, and strategic. Technological lessons are derived from the use of weapons and sensors and their platforms and equipment. They have great value in improving existing or designing new weapons, sensors, and equipment. Tactical lessons are derived from the study of planning, preparing, and executing battles, engagements, strikes, and other tactical actions. In contrast, operational lessons are deduced from a thorough study of all aspects of major operations and campaigns. Strategic lessons are learned from the comprehensive study and analysis of a war as a whole and its political, diplomatic, military, economic, informational, and other aspects.

The higher the level of war, the greater the importance of the lessons learned or mislearned. Also, the higher the level, the longer the value of the lessons. Hence, operational lessons are by their nature more durable than tactical lessons. Likewise, strategic lessons last longer than operational or tactical lessons. Lessons on intangible aspects of warfare are generally more durable than lessons derived from the physical aspects of a given situation. War is a clash of human will; hence, the human element is a critical part of it and will remain so in the future. Therefore, lessons pertaining to leadership, doctrine, unit cohesion, morale and discipline, and training are essentially timeless. In contrast, technological lessons are by their very nature short term. Lessons learned are interrelated. For example, tactical lessons learned greatly influence the theory and practice of operational art, while operational lessons affect the theory and practice of strategy and even policy.

By conducting a comprehensive analysis of past wars, it is possible to construct some hypotheses about future war.⁴⁷ They could be sound or partially or even completely false.⁴⁸ Hence, they should be tested in exercises/maneuvers and wargames in

peacetime and, if necessary, modified or abandoned. Very often, the main reason for an erroneous vision of the character and duration of a future war was ignoring or mislearning the lessons of more recent wars. For example, in the years preceding the outbreak of World War I, the German military focused almost exclusively on studying and deriving lessons from the Franco-Prussian War of 1870–1871. The Germans believed that any future war would be a war of movement and therefore decisive and short. The Germans believed that the planned campaign against France would last no more than 8 to 10 weeks and the war would end in 4 to 6 months.⁴⁹ As it turned out, the war went on for over 4 years, with horrendous losses of personnel and materiel on both sides. The French military likewise failed to correctly anticipate the character of the future war in the years preceding August 1914. The prevalent French view was that a future war would be short and that maneuvering would play the predominant part; it would be a war of movement.⁵⁰

During the 1930s, the French and British mistakenly believed that the next war would be a positional war, as World War I had been. Thus, in contrast to the Germans, they failed to prepare for a war of movement. In retrospect, the French vision of the future war was deeply flawed because it was based on three false readings of military developments at the time: the exaggerated destructiveness of firepower, the dominant role of defense, and the superiority of the so-called methodical battle.⁵¹

Content

The main components of military theory include the nature and character of modern war and its elements and how these elements are related to and interact with each other. A sound military theory should encompass not only military but also nonmilitary aspects that affect preparation for and conduct of war.⁵² A general theory of war should analyze the impact of social factors on the conduct of war, specifically ideology, science, and technology.⁵³ It should encompass broad description of nonmilitary elements of power.⁵⁴ It should link war with other constituent parts of society. In relative terms, nonmilitary elements of power should play a larger role in developing theories of insurgency, counterinsurgency, and combating terrorism than

the main components of military theory include the nature and character of modern war and its elements and how these elements are related to and interact with each other

in theories of high-intensity conventional war. A sound theory of war should also describe the ways and means of preventing the outbreak of war.⁵⁵

All wars consist of features that are unchangeable or constant regardless of the era in which they are fought and those that are transitory or specific to a certain era. The first category makes up the war’s “nature,” while the second comprises its “character.” In general, “nature of war” refers to those constant, universal, and inherent qualities that ultimately define war throughout the ages, such as the dominant role of policy and strategy, psychological factors, irrationality, violence, hatred, uncertainty, friction, fear, danger, chance, and luck.⁵⁶ In contrast, “character”⁵⁷ refers to those transitory, circumstantial, and adaptive features that account for the different periods of warfare throughout history.⁵⁸ The character of war is primarily determined by prevailing international security environment, domestic politics, and the economic, social, demographic, religious, legal, and other conditions in a certain era, and also the influence of new technological advances. In studying the character of war, the focus should be on those elements that are more durable and tend to display certain patterns. New technological advances, which are inherently ephemeral in their character, should not be used in the development of military theory. Any theory of war based predominantly on technology is bound to not be valid for too long. More important, a theory based on current technologies (such as NCW or EBO) or, even worse, future and unproven ones (for example, the French Navy’s “Young School” or Giulio Douhet’s theory of strategic bombing) would lack the most critical element in any sound military evidence—historical examples. The most durable military theory focuses less on the latest technology and more on the infinite complexities in its use.⁵⁹

A military theory should consist of a coherent group of basic concepts together with a body of propositions, principles, and cause and effect relationships that generally holds true. The coherence and relationships of the theory are shown by its structure. The structure of the theory, like any structure, will appear to vary with the point of view one takes. However, if the theory is sound, then it will be logical and coherent from any vantage point. Each component of a military theory itself contains overlapping and interwoven topics and subtopics, which can be categorized, arranged, and developed in various ways. The major subjects comprise the primary and fundamental core of substantive military knowledge. Sound military theory should describe the manner in which war is related to other parts and actions of human society. It should include the nature of various forces that act throughout the whole structure and the description of the way these forces act and interact.⁶⁰

In contrast to general military theory, a theory of land, air, or naval warfare is narrower in its scope. It should be focused predominantly on combat employment across the entire spectrum of possible conflict on land, sea, or air, but with the emphasis on the high-intensity conventional war. It should describe the nature and character of warfare in each physical medium (land, sea, and air); their mutual relationships and interactions; the role and importance of the human factor; the principal objectives of land, naval, and air warfare; and methods of combat force employment. Theories of land, naval, and air warfare should include constants derived from the study of past wars. For example, experience shows the importance of achieving surprise, using deception, and concentrating overwhelming power at a decisive place and time. It also shows that the pursuit of multiple objectives and the lack of unity of command and cooperation among combat arms or services invariably had adverse effects on the ultimate success in combat.

a military theory cannot have the same precision or consistency as a theory in the physical sciences because the means of measurement are highly uncertain

Features

A sound military theory should meet several requirements. First and foremost, it should be *general* in its nature to accommodate all aspects of its subject. It should be flexible so as to allow sufficient space for further development. It should search for questions in the conduct of war but avoid giving answers to these questions. A military theory cannot have the same precision or consistency as a theory in the physical sciences because the means of measurement are highly uncertain. Controlled experiments cannot be used, and the analyses available are not always objective.⁶¹ The reason why the theories of Sun Tzu, Machiavelli, and Clausewitz are still viable today is that they are general in character. They avoided reliance on technologies of their respective eras or embracing various pseudoscientific theories and intellectual fads. For example, Clausewitz rejected quantitative analysis and scientific formulas in favor of philosophical insights.⁶² In contrast, theories developed by Jomini and Fuller proved to be much less durable. Similarly, the theory of naval strategy developed by Mahan, who was influenced by Jomini, has less validity than the theories of Corbett, who was a Clausewitzian.

Marshal de Saxe said that war has *no rules*, and Clausewitz agreed. Apparent adherence to fundamental laws was a major criticism of Jomini.⁶³ Clausewitz cautioned that *On War* presented material for theory but not theory itself. He avoided creating a rigid structure of thinking. Clausewitz did not want someone to think that all that was needed was to fit the evidence into the preexisting framework and thus create a theory that was “correct.”⁶⁴ In his view, only general statements and principles could be made about war.⁶⁵ Clausewitz wrote that even the most realistic theory cannot match the reality. It follows that all attempts to establish rules with prescriptive power are pointless in an activity such as fighting and that military theory could never be immediately utilitarian.⁶⁶ Clausewitz argued that absolute so-called mathematical factors can never find a firm basis in military calculations. From the very start, there is an interplay of possibilities, probabilities, and luck that weaves its way throughout the length and breadth of the tapestry. In the whole range of human activities, war most closely resembles a game of cards.⁶⁷ In contrast, the

leading advocates of information warfare wholeheartedly embraced the idea that war consists of a set of rules. For example, NCW advocates falsely claimed that, as supposedly was the case with earlier theories of war, network-centric warfare has competitive space, rule sets, and metrics.⁶⁸ The EBO concept relies heavily on highly suspect methodologies of predicting first-, second-, third-, and n^{th} -order effects and various metrics, such as measures of effectiveness and measures of performance to assess the effectiveness of actions by friendly forces.

Military theory must be *comprehensive*. This means that it should encompass employment of military forces in peacetime, operations short of war, and in high-intensity conventional conflicts. Military theory should be as *simple* as possible, for if it strayed from the basic factors inherent in war, it would soon become too complicated to be applied to anything but specific conditions.⁶⁹

Optimally, a theory of war should be based on the *constants* of absolutes, not on transitory occurrences in warfare. Its structure should include a number of all-encompassing concepts that will retain their validity regardless of the context of situation and historical developments. Clausewitz scrupulously concentrated on concept rather than context. This focus has given his work timelessness.⁷⁰

A sound military theory should be written in simple and clear military language so that it is easily understood by all, debated, and accepted. Various terms borrowed or adopted from business practices, as is the case with NCW, simply do not have a place in military theory. A major problem with SOD was the use of language from postmodern philosophers, literary theory, architecture, and psychology, which was largely unintelligible. In short, military theory that cannot be understood is worse than useless.

Theory versus Reality

Theory based on historical experiences consists of interpretations, facts, events, causes, and effects, which are then presented in a generalized form. Sound theory represents a reliable set of beliefs sustained and justified by one's understanding of the true nature of war. Good theory is the result of scientific rigor and disciplined thinking. However, the soundness of a military theory

can be most realistically tested during a war.⁷¹ Everything else is a poor substitute and inadequate for combat experience.⁷² Hence, a military theory must reflect the realities of war; otherwise, it must be modified or drastically changed to bring it in harmony with reality.

In the application of a military theory, a compromise should be made between what is ideal and what is realistically possible. However, the subject of warfare is so broad and complex that a single theoretical construct cannot explain it. The best educated and most theoretically ready commander might not actually win on the battlefield. Victory remains a matter of tactical, operational, or strategic skill, because the conduct of war is, and will remain, largely an art, not a science, as apparently too many proponents of information warfare believe.

A sound military theory is the key prerequisite for having a comprehensive and deep knowledge of all aspects of war. Its main purpose is not to provide a commander with a checklist on how to make quick and sound decisions and then skillfully execute them. Its purpose is to provide a solid knowledge and understanding of war so a commander can act swiftly and decisively in combat, especially when faced with an unforeseen situation. Knowledge of military theory is essential to understanding and then creatively applying doctrine.

Military theory is greatly affected by scientific theories of a certain era and their interpretation by leading philosophers. Since the turn of the 20th century, numerous scientific theories have emerged. They have been accompanied by a large number of diverse philosophic interpreters. Some of the new theories, such as general systems theory, are highly controversial and even pseudo-scientific. Postmodern philosophy is also controversial, and it represents just one of many philosophical currents. Yet it has been adopted as a foundation of SOD and the U.S. Army's "design."

Military theory is derived from practice. Hence, from a multitude of empirical examples, certain commonalities are derived, which are then included in the body of military theory. In contrast, a theory of science such as mathematics, physics, or chemistry is based on certain hypotheses that are repeatedly tested and then eventually discarded, modified, or accepted as a theory.

The history of the conduct of war in all its aspects is the very foundation of any sound military theory. It is military/ naval history that allows a theorist to select historical examples to either clarify or obtain evidence in support of a given statement or theoretical construct. Without historical examples and lessons learned, it is difficult to see how sound military theory can be developed. Another critical part of military theory is the vision of future war. A sound military theory should take fully into account the effect of current and future technologies. However, it should not be based predominantly or, even worse, exclusively on technologies. A sound military theory should be general and flexible. It should focus on the constants, not on ephemeral occurrences in the conduct of war. It should discern war's patterns. It should be all encompassing but uncomplicated and simple at the same time. It should be articulated in simple, clear, and easily understandable language. The only test of validity of a military theory is to practice war. A military theory can approach the reality of war but it cannot completely match it. It must be modified, altered, or even discarded if it is in a serious disconnect with reality. **JFQ**

NOTES

¹ Henry E. Eccles, *Military Concepts and Philosophy* (New Brunswick, NJ: Rutgers University Press, 1965), 24.

² Webster's Third New International Dictionary, *Unabridged* (Springfield, MA: Merriam-Webster, Inc., 1981), 666.

³ Alfred Stenzel, *Kriegsfuehrung zur See. Lehre vom Seekriege* (Hannover/Leipzig: Mahnsche Buchhandlung, 1913), 12–13.

⁴ Wade A. Tisthammer, "The Nature and Philosophy of Science," 1, available at <<http://angelfire.com/mn2/tisthammerw/science.html>>.

⁵ Eccles, *Military Concepts and Philosophy*, cited in J.P. Storr, *Human Aspects of Command* (Wiltshire, UK: Directorate General of Development and Doctrine, British Army, 2003), 3; Julian Lider, *Military Theory: Concept, Structure, Problems* (New York: St. Martin's Press, 1983), 15.

⁶ Colin S. Gray, "Clausewitz, History, and the Future Strategic World," presentation at the Strategic and Combat Institute Conference *Past Futures*, Royal Military Academy, Sandhurst, July 3–4, 2003, and Marine Corps Command and Staff College, Quantico, VA, September 9–10, 2003 (Fort Leavenworth, KS: Strategic and Combat

Studies Institute, Occasion Nr 47, printed in United Kingdom under arrangements of Astron Document Services, 2004), 10.

⁷ Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1984), 132.

⁸ Cited in Robert P. Pellegrini, *The Links between Science, Philosophy, and Military Science: Understanding the Past, Implications for the Future* (Maxwell AFB, AL: Air University Press, August 1997), 26.

⁹ Stenzel, 14.

¹⁰ Clausewitz, 132, 141.

¹¹ Jehuda L. Wallach, *The Dogma of the Battle of Annihilation* (Westport, CT: Greenwood Press, 1986), 4.

¹² Eccles, *Military Concepts and Philosophy*, 22.

¹³ Henry E. Eccles, "Military Theory and Education: The Need for and Nature of," *Naval War College Review* (February 1969), 72.

¹⁴ J.P. Storr, *Human Aspects of Command* (Pewsey, Wiltshire, UK: Directorate General of Development and Doctrine, British Army, 2003), 6, 5.

¹⁵ *Ibid.*, 3, 6.

¹⁶ Tisthammer.

¹⁷ Wallach, 6–7.

¹⁸ Cited in Patrick Kelly III, *Modern Scientific Metaphors of Warfare: Updating the Doctrinal Paradigm* (Fort Leavenworth, KS: U.S. Army Command and General Staff College, May 1993), 4.

¹⁹ *Ibid.*, 3.

²⁰ Pellegrini, 42.

²¹ Kelly, 3.

²² Pellegrini, 21.

²³ *Ibid.*, 31, 33–34.

²⁴ *Ibid.*, 34.

²⁵ "History of the Scientific Method," available at <www.experiment-resources.com/history-of-the-scientific-method.html>.

²⁶ Pellegrini, 1–2.

²⁷ *Ibid.*, 50.

²⁸ Paul J. Blakesley, *Operational Shock and Complexity Theory* (Fort Leavenworth, KS: U.S. Army Command and General Staff College, May 2005), iii.

²⁹ From the Latin word *systema*; *system* is defined as a functional group of related elements forming a complex whole; it can refer to computers, social science, planning, organization, management and business, mathematics, physics, and so forth. Steven M. Rinaldi, *Beyond the Industrial Web: Economic Synergies and Targeting Methodologies* (Maxwell AFB, AL: Air University Press, April 1995), 7–8, 10. The U.S. military defines a system as a functionally, physically, or behaviorally related group of elements that interact as a whole. Joint Warfighting Center, Joint Doctrine Series, Pamphlet 7, *Operational Implications of Effects-based Operations (EBO)* (Norfolk, VA: United States Joint Forces Command, November 2004), 2.

³⁰ Robert Jervis, "Complex Systems: The Role of Interactions," in *Complexity, Global Politics, and National Security*, ed. David S. Alberts and Tom Czerwinski (Washington, DC: National Defense University Press, 1997), 1.

³¹ Blakesley, 24.

³² Pellegrini, 50.

³³ Blakesley, 28.

³⁴ John Schmitt, "Command and (Out of) Control," in *Complexity, Global Politics, and National Security*, 6–7.

³⁵ Blakesley, 28.

³⁶ Clausewitz, 154–155.

³⁷ Wallach, 4.

³⁸ Werner Hahlweg, "Umformungen im Militärwesen und das Verhaeltnis von Theorie und Praxis," *Wehrwissenschaftlichen Rundschau*, Nr. 4, 1969, 189.

³⁹ Clausewitz, 157–159.

⁴⁰ Ibid., 162.

⁴¹ Herbert Richmond, *National Policy and Naval Strength and Other Essays* (London/New York/Toronto: Longmans, Green, 1934), 279.

⁴² C.B. Mayo, "The Study of History for Naval Officers," *U.S. Naval Institute Proceedings* (November 1921), 1757.

⁴³ B.H. Liddell Hart, *Why Don't We Learn From History* (London: Allen & Unwin, 1944), 7.

⁴⁴ Clausewitz, 171.

⁴⁵ Ibid., 170.

⁴⁶ Cited in Jay Luvaas, "The Great Military Historians and Philosophers," in *A Guide to Use of Military History*, ed. John E. Jessup and Robert W. Coakley (Washington, DC: U.S. Army Center of Military History, 1988), 76.

⁴⁷ Storr, 4.

⁴⁸ Jacob Bronowski, *The Ascent of Man* (Boston: Little, Brown, & Company, 1974), 140, 240.

⁴⁹ Christian Mueller, "Anmerkungen zur Entwicklung von Kriegsbild und operativ-strategischem Szenario im preussisch-deutschen Heer vor dem Ersten Weltkrieg," *Militaergeschichtliche Mitteilungen* 57 (1998), 412.

⁵⁰ J.E.C. Fuller, *The Foundations of the Science of War* (London: Hutchinson, 1925), 29.

⁵¹ Eliot A. Cohen and John Gooch, *Military Misfortunes: The Anatomy of Failure in War*, 1st ed. (New York: Vintage Books, 1991), 215.

⁵² Lider, 15.

⁵³ Ibid., 3.

⁵⁴ Eccles, "Military Theory and Education," 74.

⁵⁵ Lider, 15.

⁵⁶ Michael Sheehan, "The Changing Character of War," in *The Globalization of World Politics: An Introduction to International Relations*, ed. John Baylis, Steve Smith, and Patricia Owens, 4th ed. (Oxford: Oxford University Press, 2007), 216.

⁵⁷ The aggregate of features and traits that form the individual nature of some person or thing; moral or ethical quality; an account of the qualities or peculiarities of a person or thing. *The*

Random House College Dictionary, rev. ed. (New York: Random House, Inc., 1980), 225.

⁵⁸ Sheehan, 216.

⁵⁹ Ryan Henry and C. Edward Peartree, "Military Theory and Information Warfare," *Parameters* (Autumn 1998), 11; available at <www.carlisle.army.mil/USAWC/PARAMETERS/Articles.98autumn/henry.htm>.

⁶⁰ Eccles, *Military Concepts and Philosophy*, 28, 73–74.

⁶¹ Eccles, "Military Theory and Education," 72.

⁶² Henry and Peartree, 3.

⁶³ Storr, 3.

⁶⁴ Scot Robertson, *The Development of RAF Strategic Bombing Doctrine, 1919–1939* (Westport, CT: Praeger Publishers, 1995), 6.

⁶⁵ Pellegrini, 26.

⁶⁶ Peter Paret, "The Genesis of *On War*," in Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (New York: Everyman's Library, Alfred A. Knopf, 1993), 16.

⁶⁷ Clausewitz, 97.

⁶⁸ Director, Force Transformation, *The Implementation of Network-Centric Warfare* (Washington, DC: Office of Force Transformation, January 5, 2005), 16.

⁶⁹ Pellegrini, 23–24.

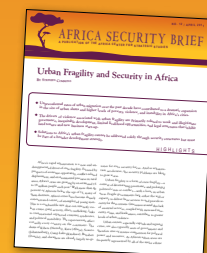
⁷⁰ David A. Fastabend, *A Theory of Conflict and Operational Art* (Fort Leavenworth, KS: U.S. Army Command and General Staff College, May 1988), 34.

⁷¹ Robertson, 5.

⁷² Pellegrini, 21.



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Africa Security Brief 12 *Urban Fragility and Security in Africa* by Stephen Commins

Unprecedented rates of urban migration in Africa over the past decade have contributed to a dramatic increase in urban slums as well as higher poverty, violence, and instability. The drivers of violence are primarily related to weak governance, inequitable development, limited economic opportunities, and legal structures that inhibit land tenure. The author argues that solutions to Africa's urban fragility cannot be addressed through conventional security approaches, but must be part of a broader strategy that recognizes urban fragility as a development and security problem, that improves local government and accountability, that increases opportunities for the unemployed to earn a livelihood, and that reforms legal structures to enable the urban poor to gain land tenure and a stake in society.



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Soldier briefs Afghan police during operation to assess night activities and gather intelligence in Paktika Province

U.S. Army (Kevin Martin)

Establishing a Framework for Intelligence Education and Training

By REBECCA L. FRERICHS *and* STEPHEN R. Di RIENZO

In January 2010, Major General Michael T. Flynn, in conjunction with Captain Matt Pottinger and Paul D. Batchelor, published a paper that made the U.S. Intelligence Community (IC) stand up and shout. Titled *Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan*, the paper attempted to address the weaknesses the authors saw in the collection and use of intelligence in the field. However, the paper inadvertently situated itself in a debate regarding the utility of education and training in the intelligence world—a context that has real effects on the subject the authors sought to improve.

For Flynn and his colleagues, the “tendency to overemphasize detailed information about the enemy at the expense of the political, economic, and cultural environment that supports it”¹ highlights the difference between tactical and strategic thinking. This dichotomy, however, betrays the essence of a debate that, in more detail, underscores the importance of mental flexibility and agile adaptive behavior. For while *training* equips a person with necessary skills and attributes that can be robotically replicated, *education* allows an individual to move beyond the “instructions” and adapt to incorrect or poorly written instructions, or none at all, to improvise training in order to get the job done. In other words, the reason why the IC can be “failing” in the field is that operators are trying to bend the environment to their training instead of being flexible and agile enough to make their knowledge fit the environment.

The National Defense Intelligence College, now being redesignated the National Intelligence University (NIU), is chartered to provide intelligence education to members of the IC. Its programs are focused on national security challenges including the more traditional intelligence goal of understanding adversarial capabilities and intentions, along with broader intelligence challenges such as sociocultural trends and conflicts, failed and failing states, terrorism, proliferation, and the rise of non-state actors.² However, creating and implementing education programs that address the broad and divergent needs of the IC to allow it to successfully carry out its mission necessitate an understanding of intelligence, the importance of training, the need for and nature of intelligence education, and the ability to synthesize all of these elements.



President meets with intelligence and security officials in Oval Office

White House (Pete Souza)

Intelligence

The IC’s primary mission “is to collect and convey the essential information the President and members of the policymaking, law enforcement, and military communities require to execute their appointed duties.”³ Yet each agency and organization has its own culture, goals, and approaches to identify and convey “essential information.” For example, what the U.S. Department of State (DOS) identifies as “essential” is different than what the Department of Defense (DOD) deems “essential.” DOS goals are to “[a]dvance freedom for the benefit of the American people and the international community by helping to build and sustain a more democratic, secure, and prosperous world composed of well-governed states that respond to the needs of their people, reduce widespread poverty, and act responsibly within the international system.”⁴ The DOD mission “is to provide necessary forces and capabilities to the Combatant Commanders in support of the National Security and Defense Strategies.”⁵

While the missions of the two departments are complimentary, DOS is best described as *proactive*, while the DOD mission can be considered *reactive*. Thus, the intelligence needed to craft policy and conduct foreign policy for DOS is different than the intelligence needed to assess and

respond to threats from adversaries for DOD. Trying to identify and define the “essential information,” let alone “collect and convey” that information, can become overwhelming.

For NIU, intelligence studies are based upon the *National Security Strategy of the United States of America* (NSS). This, however, does nothing to narrow the understanding of intelligence. On the contrary, the NSS is “focused on renewing American leadership so that [America] can more effectively advance [American] interests in the 21st century.”⁶ By identifying the world “as it is” and the world “as [America] seeks,” the NSS details the domestic and foreign goals for the Nation. These goals include strengthening U.S. national capacity (defense, diplomacy, economic, development, homeland security, strategic communications, the American people, and the private sector); disrupting, dismantling, and defeating al Qaeda and other violent extremists; reversing the spread of weapons of mass destruction; advancing peace, security, and opportunity in the Middle East; investing in strong and capable partners; achieving cyber security; strengthening education and human capital; encouraging technological innovation; achieving sustainable growth and development; strengthening institutions; and promoting traditional American goals of democracy, human rights, and religious

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U.S. Army (Seth Laughter)



Civilian training developer observes Army human intelligence collector during role-playing exercise to improve Soldiers' information-gathering skills

freedom.⁷ Intelligence, or the “essential information,” then, is the information needed to support or implement the goals of the NSS.⁸

Implementation of the NSS requires information from a vast array of sources and disciplines. The information needed to disrupt a single terrorist is different than the information needed to dismantle a terrorist organization. More important, the information needed to prevent future terrorists or terrorist organizations from threatening U.S. interests requires knowledge from the disciplines of political science, psychology, sociology, and economics, among others, and the patience to wait decades—or more—to see the fruition of policy. Vital to these efforts is an understanding of when, and under what

the information needed to disrupt a single terrorist is different than the information needed to dismantle a terrorist organization

circumstances, the IC should focus on training, education, or both.

Education Is Not an Assembly Line

The rapid pace of globalization, coupled with the rise of nonstate actors and other nontraditional adversaries, means an ever-changing threat environment. The fact that the IC has made ongoing training and education a priority is easily identified in the Vision and Mission statement posted by the Office of the Director of National Intelligence (ODNI):

The United States Intelligence Community must constantly strive for and exhibit three characteristics essential to our effectiveness. The IC must be integrated: a team making the whole greater than the sum of its parts. We must also be agile: an enterprise with an adaptive, diverse, continually learning, and mission-driven intelligence workforce that embraces innovation and takes initiative. Moreover, the IC must exemplify America's values: operating under the rule of law, consistent with Americans' expectations for protection of privacy and civil liberties, respectful of

human rights, and in a manner that retains the trust of the American people.⁹

There is no more established way of standardizing engagement and integration than through education. In an ethnographic manner, one can witness the full life cycle of knowledge transference when a group of individuals—preferably from a mixed cultural, linguistic, and/or professional background—learns, deconstructs, debates, and reconstructs ideas. In this manner, education serves as a vehicle for engagement that few, if any, other forums can replicate or even simulate.

By way of agility, the best way to ensure an analyst's aptitude to adapt is to continually value nonlinear thinking that is based on the initiative of asking questions that may seem outlandish, facile, or even downright bizarre, in order to process the full spectrum of information before reconstructing a solution from the complex, palpable amount of information that is exposed in the search for an answer.

These aforementioned attributes, if they are to form the proposed endstate for how the IC should function, must find a home within

the organic nature of what education comprises. However, training and education are different concepts, and while these differences should be celebrated for what they are and what they do, an understanding of the minute details that make them unique offers a way of not confusing the strengths that make each of them mandatory for the IC mission.

In the simplest terms, training is the process of skills acquisition, while education is the process of knowledge acquisition. Training and education are related and often overlap, but the goals are different. The IC routinely engages in training activities—from learning how to utilize technology to learning how to write an analytical product. At the heart of IC training is learning how to be a “good” analyst. Over time and with repeated training, the goal is to produce a highly skilled and competent IC professional—or an individual who knows the “instructions” and how to effectively and efficiently implement them.

Education has different goals, but there are specific skills—or training—necessary to achieve those goals. The required skills are referred to as “information literacy” and describe “a student’s competency in acquiring and processing information in search for understanding.”¹⁰ Those skills include the ability to determine the type of information needed; access that information effectively and efficiently; critically evaluate sources and content of information; effectively use information and understand the social, economic, and legal issues that surround its use; and observe appropriate regulations, laws, and policies related to the access of information.¹¹ The acquisition of these skills is fundamental to any education program; however, it is only the means to the goal and not the goal itself.

In many respects, “knowledge for its own sake” is the ultimate goal of education. But beyond this philosophical aspiration, education seeks to expose students to a wide variety of knowledge sources (traditional and nontraditional), epistemologies (“ways of knowing”), and the critical thinking and reasoning skills necessary to synthesize and integrate knowledge. Undergraduate programs typically seek to create consumers of knowledge, while graduate programs aim to create producers of knowledge. Both require students to challenge and question established beliefs, but, more important, both require students to challenge and question their own mindsets or perspectives (“way of understanding an issue or problem”).

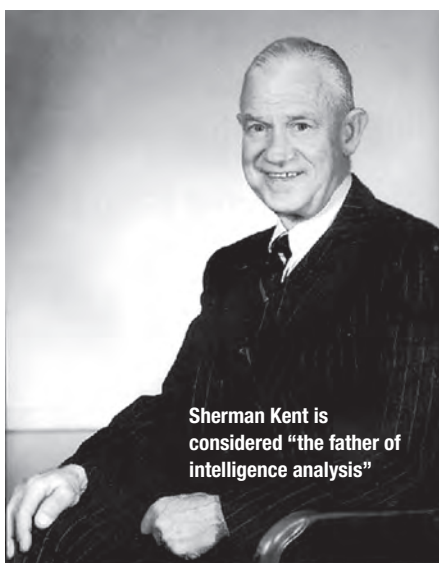
The goal of intelligence education, then, is to produce individuals who can creatively explore, describe, or explain intelligence issues or problems. Succinctly, the ultimate goal of intelligence education is the acquisition of transferable knowledge.

Beginning with a foundation of information literacy, and given the breadth of what constitutes intelligence, developing an intelligence education program can be daunting. In particular, an effective and “standard” canon—a selection of authors, books, or other information that is considered the basis of the discipline—is impossible to create. Intelligence relies on research from a variety of recognized disciplines such as sociology, anthropology, physics, engineering, history, political science, communications, agriculture, economics, and finance. In short, the field of intelligence is a true interdisciplinary field encompassing the full range of both the social and the natural sciences. Each of these disciplines (and the subdisciplines they have spawned) has its own canon. These canons, however, create unique perspectives that can unintentionally stymie critical and creative thinking and reasoning in intelligence—for example, the discipline of economics approaches political instability differently than the discipline of sociology. But the lack of a canon and the itinerant educational goals associated with an interdisciplinary approach present their own problems: educational goals “can rarely be stated in terms as student mastery of a specifiable body of knowledge, although certain skills may be identified.”¹² This may, however,

be an advantage for intelligence education as the removal of discipline-specific standards means that the focus of student education is the development of intellectual capacity and critical and creative thinking.¹³

While the IC is fond of the term *subject matter expert*, the necessity of adopting an interdisciplinary approach calls it into question in relation to intelligence education. This term is used to lend authority and credibility to particular individuals or analytical products, but it has little relevance in intelligence education. An educator or student may become knowledgeable on a particular topic or region; however, there is no endpoint in knowledge acquisition. Therefore, the possibility of a student knowing more than the educator in intelligence education is an established, welcomed fact that lends to a more diverse and rich learning environment. In other words, educators are forever students, and students have the ability to sharpen and expand an educator’s knowledge. As educationalist John Dewey noted, “Education is not a preparation for life, education is life itself.”

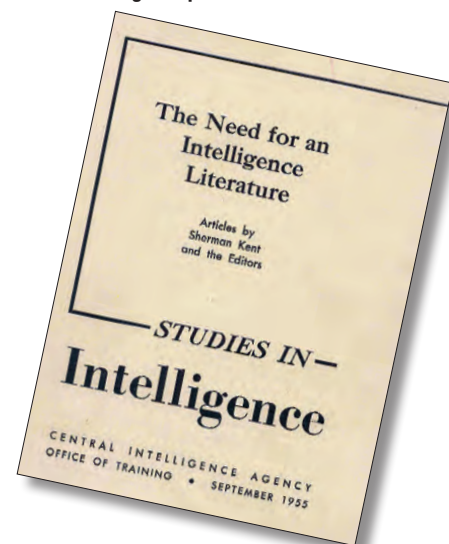
Perhaps more importantly in understanding the difference between intelligence education as practiced by the NIU compared to other, nonclassified environment “intelligence education” institutions, the NIU positions itself inside the tactical intelligence environment but also draws from continuing advances in research throughout the social and natural sciences. This dictates the NIU need to continually “churn” educators and education by infusing the cadre of IC professionals with



Sherman Kent, 1903-1986.

Central Intelligence Agency

Kent essay published in inaugural issue of *Studies in Intelligence* explains literature needed for intelligence profession





Soldiers from military intelligence battalion parade during change of command ceremony

U.S. Air Force (Lou Czarnecki)



Academic, government, military, and international experts discuss broad range of deterrence issues during U.S. Strategic Command Deterrence Symposium

DOD



Secretary Gates speaks at U.S.-Afghan security consultation forum at Pentagon

DOD (R.D. Ward)

fresh epistemologies and perspectives, resulting in new approaches to problem-solving and research. The world is not static, and neither is knowledge. While the institutional knowledge that specialists in the IC bring to intelligence education is invaluable, an occasional shakeup in education is a necessity to avoid becoming locked into one epistemology, one perspective, and one approach to understanding intelligence. New and creative approaches are paramount to remain forward-thinking and relevant to supporting U.S. national security objectives. In other words, when an IC call for standards becomes an excuse to sideline innovation, the result is nothing more than stagnation masquerading as standardization. For the IC, this is the most dangerous route that can be imagined because, as opposed to graduates from other universities, NIU graduates have a vested interest in identifying concepts, techniques, and even radical hypotheses (think “red team” assessments) that will quell nominal indicators before they become violent enablers.

‘Til Death Do Us Part

The interdisciplinary and broad nature of intelligence education stands in sharp contrast with the specific training needs and goals of the 17 agencies and organizations that comprise the IC. The ODNI was created to coordinate these needs and goals as well as develop IC-wide analytical standards.¹⁴ IC professionals are trained on these standards, and they do complement intelligence education. But the standards should not dictate educational goals. Education inspires individuals to critically evaluate information and creatively engage in transformational problem-solving. In other words, as opposed to training, which is didactic in its approach, higher education is essentially Socratic learning. As such, to maintain a vivacious and networked strategic education, knowledge

exploration cannot focus on teaching students to merely regurgitate information and to pass exams; rather, it must communicate models and material that introduce, and ultimately stimulate, independent investigations. Accomplishing this should be not only the aim of intelligence education, but also the point of departure from training to education.

Whether about war, counterterrorism, counterinsurgency, or the impact of religion on threat analysis, intelligence education should accentuate critical and creative reasoning and thinking and the application of theoretical constructs into current events. By challenging educators and students to move beyond the superficial treatment of course material as “dead” (in the case of historical studies) or “inapplicable” (in terms of “academic” theory), education programs must focus on the construction of paradigms of understanding that foster personal growth, including an appreciation of individual potential and an acknowledgment that there is a definitive symbiotic relationship between the educator and the student. This foundation avoids the detrimental effects of becoming the student’s “friend” by promoting professional development only or of conveying an image of the frightening, unapproachable, know-it-all professor. With this approach, therefore, a balance is devised where flexibility and structure coexist to create an atmosphere of inquisitiveness and tactical engagement. After all, the student will become the educator one day.

Examples of the success of the above model abound. However, there seems to be a culturally ingrained belief in the IC that there is an exclusive nature between training and education. This belief, while not overtly stated, is covertly contemplated and symbolically given form as: “Those who can, do. Those who can’t, teach.”

This quote, in the immediate context of this article, betrays an interesting mentality when contemplating the conversion of a tradecraft practitioner into a strategic thinker and palpably highlights the difficulty in assuring people that education and training are not a matter of a bipolar choice. Instead, training and education represent a phased developmental process in which training will reach its limit but further enhancement through education is necessary to confront national security challenges. Thus, if the Central Intelligence Agency’s (CIA’s) successful incorporation of academics, led by Sherman Kent, lays the very foundation of today’s IC, then it is time again to see the utility of “academic” culture when contemplating how the IC will engage with a world where globalization and the “openness of modern information networks . . . undermine U.S. interests.”¹⁵ This is why strategic thinkers require a background beyond tradecraft with an aggressive propensity toward taking on whatever challenges exist. For the IC, therefore, a lessons-learned future needs to be rebuilt upon the foundation that the CIA intuitively understood to be the best groundwork for strategic analysis (long-term forecasts and short-term solutions, methodological integration, and so forth) that is based on the fundamental principles of an inclusive education and not the personalized, exclusive tradecraft techniques of individual agencies.

There is uniform appreciation for education as a tool, but few beyond the profession are prepared to welcome, let alone absorb and understand, the complex methodologies and theoretical constructs that influence strategic planning and tactical implementation. Yet despite educationalist tendencies to organically think outside the box and see possibilities beyond short-term solutions based on tradecraft training, few practitioners are

the IC need not frame the argument as “either training or education,” but must look at where each, much like in a solid relationship, builds on its strengths to fill the other’s deficiencies

conscious of the utility of moving the concept of education away from being understood as merely a path toward career advancement and integrating it into the “doing” part of the IC. Therefore, success for the IC is truly a matter of “til death do us part” and not a matter of “divorce” based on mistrust of motives or misunderstanding of utility. To put this another way, look no further than the environments created from “big thinking” that directly influence the course of tactical tradecraft remodeling that happens, or should happen, when the environment of the operators changes.

Strategic Thinking that Created Tactical Advantage

In 1947, George F. Kennan’s “The Sources of Soviet Conduct” (originally published under the pseudonym “X” and also known as “The Long Telegram”) changed the entire foreign policy approach to the Soviet Union and ushered in the Cold War strategy of containment.¹⁶ More recently, Francis Fukuyama’s 1989 paper “The End of History” and 1992 book *The End of History and the Last Man* and Samuel Huntington’s 1993 response to Fukuyama, “The Clash of Civilizations?” combined to set the stage for post–Cold War thinking on the future of the nation-state with implications for the future of U.S. national security.¹⁷ The Fukuyama-Huntington continuum still spawns discussion, debate, and dissent within academic, government, and IC circles. Kennan, Fukuyama, and Huntington did not adhere to ODNI analytical standards: instead, they represent the possibilities associated with inspired critical and creative thinking and reasoning. Education affords students and educators the opportunity to engage in this type of “big thinking” and reevaluation of the “conventional wisdom.”

Lying between the binary positions of defensive and offensive operations and proactive and reactive mission statements, both education and training are committed to protecting the integrity of that indispensable component of successful operations: col-

laboration. Accordingly, conceptualizing the complex task involved in managing the IC enterprise is less likely to be productive in the hands of mere didactic practitioners—that is to say, those who “do”—as it is in the fluidly instinctive capabilities of Socratic modelers, or those who “teach.”

As in all partnerships, arguments over who does the most work will ensue, and the temptation to “choose sides” will be compelling. The choice, however, would be a false one. The IC need not frame the argument as “either training or education,” but must look at where each, much like in a solid relationship, builds on its strengths to fill the other’s deficiencies. In terms of a historical example, both training and education proved invaluable in the Apollo 13 mission, the “successful failure,” where the steadfast knowledge that training brings successfully complemented the improvisational nature of education.

To create an environment that institutionalizes success, the IC must first come to terms with the value of intelligence education. Doing so requires a firm understanding of what intelligence education is and what it can do, as opposed to overemphasizing training, which is better understood but does not address the full spectrum of the threat confronting the United States today. As such, only in this manner can the IC justifiably assess the point at which more training or more education is better suited to gauge those threats and to make strategic suggestions for the future.

This debate over the role of training and education is long overdue and is necessary for the most efficient allocation of threat analysis and intelligence resources. While NIU is focused on strategic education, advocating for strategic engagement without tactically applicable knowledge serves no purpose in today’s world. Only when education is seen as the necessary next step to training can the United States ever hope to establish a tactically agile and mentally flexible community of intelligence professionals who rise to the challenges of the moment. And while the stakes may seem exceedingly small between these two forms of analyst improvement, it is only in such detail that relationships build a platform for sustainable success. **JFQ**

NOTES

¹ Michael T. Flynn, Matt Pottinger, and Paul D. Batchelor, *Fixing Intel: A Blueprint for Making*

Intelligence Relevant in Afghanistan (Washington, DC: Center for a New American Security, January 2010), 7–8, available at <www.cnas.org/files/documents/publications/AfghanIntel_Flynn_Jan2010_code507_voices.pdf>.

² National Defense Intelligence College, Academic Year 2010–2011 catalog, 7, available at <www.ndic.edu/academics/pdf/CC2010_web.pdf>.

³ Ibid.

⁴ U.S. Department of State, *Fiscal Year 2010 Agency Financial Report: Smart Power in Action*, 5, available at <www.state.gov/documents/organization/150505.pdf>.

⁵ U.S. Army, 2005 Posture Statement, available at <www.army.mil/aps/05/>.

⁶ *The National Security Strategy* (Washington, DC: The White House, May 2010), 1, available at <www.whitehouse.gov/sites/default/files/rss_viewer/national_security_strategy.pdf>.

⁷ Ibid.

⁸ See John G. Heidenrich, “The Intelligence Community’s Neglect of Strategic Intelligence,” *Studies in Intelligence* 51, no. 2, 15–25, for a comprehensive examination of strategic intelligence.

⁹ Office of the Director of National Intelligence, “Vision and Mission,” available at <www.dni.gov/mission.htm>. Emphasis in original.

¹⁰ Middle States Commission on Higher Education, *Characteristics of Excellence in Higher Education: Requirements of Affiliation and Standards for Accreditation* (Philadelphia, PA: Middle States Commission on Higher Education, 2006), 42.

¹¹ Ibid.

¹² Michael Field and Russell Lee, “Assessment of Interdisciplinary Programmes,” *European Journal of Education* 27, no. 3 (1992), 278.


¹³ J.W. Astin, *Assessment for Excellence: The Philosophy and Practice of Assessment and Evaluation in Higher Education* (New York: Rowman & Littlefield Publishers, 1992), 6.

¹⁴ Office of the Director of National Intelligence, Intelligence Community Directive Number 203, “Analytical Standards,” June 21, 2007, available at <www.dni.gov/electronic_reading_room/ICD_203.pdf>.

¹⁵ Office of the Director of National Intelligence, “DNI Names Robert Bryant New National Counterterrorism Executive,” news release no. 31–09, September 18, 2009.

¹⁶ “X” (George F. Kennan), “The Sources of Soviet Conduct,” *Foreign Affairs* 25, no. 4 (1947), 566–582.

¹⁷ Francis Fukuyama, “The End of History,” *The National Interest* (Summer 1989), which was expanded into *The End of History and the Last Man* (New York: Free Press, 1992). Also, Samuel P. Huntington, “The Clash of Civilizations?” *Foreign Affairs* 73, no. 3 (Summer 1992), 22–49, later expanded into *The Clash of Civilizations and the Remaking of the World Order* (New York: Simon & Schuster, 1996).



Afghan soldiers train under supervision
of U.S. Marines at Afghan National Army
Academy, Forward Operating Base Geronimo

U.S. Marine Corps (Orlando Perez)

Building the Security Force **That Won't Leave**

By WILLIAM B. CALDWELL IV and NATHAN K. FINNEY

When asked how long the United States should stay [in Afghanistan], one elder said: "Until the moment that you make our security forces self-sufficient. Then you will be welcome to visit us, not as soldiers but as guests."

—SENATOR CARL LEVIN, SPEECH ON THE FLOOR OF THE SENATE, SEPTEMBER 11, 2009

The Taliban and other insurgent elements fighting against the Government of the Islamic Republic of Afghanistan (GIROA) are convinced that they will succeed if they simply wait us out. They think they only have to maintain their influence in areas like Helmand and Kandahar Provinces, and when coalition forces begin to leave in the next few years, they will be poised to control the entire country.

What these enemies of GIROA fail to grasp is that they will not be able to wait out the Afghan National Security Forces (ANSF), which are now on the verge of becoming the enduring force in the country. Insurgents will not be able to outlast a national force that will not go away. As North Atlantic Treaty Organization (NATO) Secretary General Anders Fogh Rasmussen has stated, “[the Taliban] might think they can wait us out. But within a year or so, there will be over 300,000 Afghan soldiers and police trained and ready to defend their country. And they can’t be waited out.”¹ The mission to develop these forces, and the capacity of their government to sustain them into the future, belongs to NATO Training Mission–Afghanistan (NTM–A).

The mission of building partner capacity is not only a strategic necessity for the International Security Assistance Force (ISAF), but also a national security imperative that has been dictated by all levels of the U.S. Government. In the National Defense Strategy, our military has been directed to “support, train, advise and equip partner security forces to counter insurgencies, terrorism, proliferation, and other threats.”² To support this position, Secretary of Defense Robert Gates wrote two articles in *Foreign Affairs* that charge the U.S. military with “building partner capacity: helping others defend themselves or, if necessary, fight alongside U.S. forces by providing them with equipment, training, or other forms of security assistance . . . [because] building the security capacity of other countries must be a critical element of U.S. national security strategy.”³

Although the U.S. defense establishment has progressed since the Secretary’s

call for an increase in our capability to build partner capacity, there is still more to be done. NTM–A has been charged with building Afghan capacity primarily through four areas: the development of the Afghan National Army (ANA) and Police (ANP), the development of the Ministries of Interior (MoI) and Defense (MoD), improving the country’s human capital, and investing in Afghanistan’s physical capital. In each of these areas, the capacity we need to build must be applied at two levels: first, through direct growth and development, and second, by indirectly enabling Afghan capacity to endure by teaching Afghans both to nurture and to develop themselves. As we move to transition the campaign, our focus switches from the first level (training Afghans to fight) to the second (training Afghans to train themselves). The actions that NTM–A has taken to address these areas can serve as a case study in building partner capacity.

Developing the Afghan National Army and Police

In Afghanistan, improved capacity requires an increase in the quantity and quality of the ANSF. One cannot take precedence over the other, and the ANSF will neither grow into an effective force, nor endure in a self-sustaining manner without equal attention to both. We have found that to create an enduring, self-sustaining Afghan security force requires leaders—leaders of character, competence, and integrity. Therefore, we have begun to focus on increasing the quality of the personnel in the ANSF. This is important because it creates professionalism and integrity in those institutions with which the local population has the most daily contact. These contacts between citizens and their professional and honorable public servants enable mutual credibility and respect. When the Afghan people have faith and trust in their government institutions, they can focus on their daily lives and not be worried about extortion, threats of criminal activity, and basic survival.

To increase quantity, training facilities have been expanded and throughput increased. Additionally, faced with low recruiting last year, it was apparent we would not reach our growth objectives without taking drastic action. Working with Afghan leadership, together we implemented several initiatives to mitigate low recruiting, including pay raises, tripling the number of recruit-

ers, and standing up a Recruiting Command. In addition, we contracted for a major Afghan media recruiting campaign, authorized a further increase in recruiters, and set up 16 mobile subrecruiting stations to coincide with the start of the challenging summer months and the decrease in operations in winter.

To increase quality, programs were reoriented to place a greater emphasis on the factors that lead to a professional security force: education, training, and leadership. Education has taken two forms. First, at basic training and through traveling training teams, soldiers and police are provided basic literacy. Second, enduring institutions like the National Military Academy of Afghanistan (NMAA), the National Police Academy (NPA), and the Air School were established to develop officers who have the knowledge and skills to increase the professionalization of their force. Training has been reformed to include a necessary increase in quality, from marksmanship to tactics to driver training. Additionally, the former police training model of “Recruit-Assign” was replaced with a new model that makes training mandatory for all police recruits—creating a “Recruit-Train-Assign” model. Leadership training has been increased through courses for all levels of leadership, from junior noncommissioned officers (NCOs) to senior officers. Troop Leader Courses, NCO Staff Courses, and a Sergeants Major Academy are now developing a nascent NCO Corps. The NMAA, Company Commanders courses, a Staff College, and the National Security University are all either running or in the process of being created to develop a competent Officer Corps.

NTM–A supports the overall mission of building Afghan capacity by producing the forces required to provide security and stability for the population, and to safeguard the nation’s borders. Impressively, the ANA grew fast enough to meet the growth goal of 134,000 troops by October 2010 3 months early. Its quality is also improving through increased institutional trainer support and subsequently, once fielded, by partnering with coalition forces. Most significant of all, increased resources and dedication to leader development institutions like the NMAA are developing educated, capable, and motivated leaders who will continue to professionalize the ANA.

To support troop movement and logistical support, Afghan air capability has grown through the acquisition of additional C–27 airframes. To increase leader

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development, an air school for education and training has been developed. The Afghan Air Force (AAF) has increased its capabilities in battlefield mobility, casualty evacuation, forward observer training, humanitarian support, and mission planning.

The ANP also met its growth goal (109,000 personnel by October 2010) early, though its growth is less robust than the ANA. The greatest strides in building ANP capacity and quality are in leader development, primarily through the establishment of professional development schools and systems. This increase in quality has stemmed from many programs set into place when NTM-A was activated. Professional education has grown to 236 concurrent courses, with Afghans leading almost half of the instruction. The MoI has developed and instituted a National Police Strategy and Plan that provides the vision for a future that their personnel can follow, leading to a dramatic increase in their execution of budgets and programs (to 99 percent executed in this last solar year, ending in March 2011). The greatest growth in quality, which has made a significant impact on both the quality of officer sent to the field and the public's perception of their law enforcement officers, is the increase of literate patrolmen. Today we have over 70,023 ANSF in training, together with 75,682 who have completed training. We have educated them to almost twice the literacy rate of the country as a whole (approximately 50 percent versus 28 percent), producing better police by decreasing corruption, increasing stewardship, and reducing drug use. This is gradually garnering more respect from the Afghan people.

Recent quantity debates have occurred in the international community about the overall size of the ANSF, primarily regarding how it will be funded. Early this year, discussions began about the size of the ANA and ANP, or more precisely, whether the ANSF should grow from 305,600 personnel (to be attained by the end of October this year) to 352,000, or whether it should be enlarged

further to 378,000. The position of NTM-A is that growth to 352,000 personnel will allow the Ministries of Interior and Defense to sustain the momentum created in the last 20 months, including building a stable institution that includes most enablers required for basic army and police forces. Regardless of the end strength of the ANSF, one of the greatest challenges to growing beyond current levels (284,500 personnel going to 305,600 by the end of October) is retention. *Retention* is defined as the ability to retain personnel, whether by reenlistment, prevention of injury to include death, or mitigation against desertion. Historically, retention issues have plagued both the ANA and ANP, preventing the long-term development of soldiers and police and predictable growth in end strength. To maintain growth to 305,600 and beyond, NTM-A has set a reenlistment goal of 60 to 70 percent within the ANSF. Both the MoD and the MoI have been able to attain this goal, with the ANA reaching 69 percent in March and the ANP 60 percent (in that same month), as examples. Attrition (including losses due to medical reasons/death and desertion) remains the most difficult aspect of retention. NTM-A has set a goal of 16.8 percent attrition per year or less (or 1.4 percent each month). Some months, segments of the ANSF are able to attain this goal, to include the Afghan Uniformed Police (AUP), the ANA Commandos and Special Forces, and the ANA Corps in the north and west. However, high-tempo operations in the east and south have led to high attrition rates in the ANA Corps in those areas, as well as the elite national Afghan National Civil Order Police (ANCOP). Overall, ANA attrition rates were 27 percent annually in March and 12 percent in the ANP.

Much work has been done in the past 20 months to address retention and attrition. In fact, most measures taken by the MoI, MoD, and NTM-A have focused on this area. Pay has been increased, coalition units have been partnered with Afghan units, mandatory literacy courses have been created more widely, and all measures have been taken to create a more predictable rotation in and out of high-conflict areas of the country. These actions have steadily created an increase in retention and overall quality of the ANSF, but more must be done by all stakeholders to continue to decrease attrition.

Although our inputs (trainers, funding, and leadership) and outputs (trained ANSF, facilities built) are key to building the capac-



ity of the ANSF, our main focus remains on outcomes. As David Kilcullen has written, "These indicators [inputs] tell us what we are doing, but not the effect we are having [outcomes]."²⁴ There are three outcomes that we are interested in for the ANSF. First, that ANSF units are capable of doing in the field what they are trained to do. Second, that the people served by the ANSF have sufficient confidence in their security forces to take the necessary actions to promote stability and conduct their normal business (for example, engaging in commerce, children attending

the greatest growth in quality, which has made a significant impact on the public's perception of their law enforcement officers, is the increase of literate patrolmen



Afghan National Police Crisis Response Unit members clear compound during training conducted by ISAF

U.S. Air Force (Joseph Swafford)

school). Finally, that the Afghan people are willing to resist attempts by insurgents to reassert themselves (providing actionable intelligence, refusing to support insurgent elements, and engaging in the political process). These outcomes will indicate the success with which we have developed the capacity of the ANSF to provide security.

Leader development remains our number one priority, and it is essential to developing a professional ANSF. To be blunt, ANSF leadership deficiencies—across the spectrum of insufficient numbers of junior

officers and NCOs, gaps in the midgrade ranks, and corrupt senior officers—pose the greatest threat to our Afghan allies. Significant efforts have been made to improve leader development programs, but critical shortages in officers and NCOs persist. There is a need to continue to invest energy and creativity into ANSF leader development, and we will continue to focus on junior officers and NCO programs. To this end, ANA and ANP leader development courses have been developed, reorganized, and improved to support increased throughput requirements of

the fielded force. Steps have also been taken to ensure that higher quality and highly literate officers are distributed based on operational need, not cronyism or favoritism.

NTM-A has created a three-pillar strategy that includes experience, education, and training. Leader development for most begins with training that is conducted through professional military and law enforcement courses taught at the Regional Training Centers. Education is provided through civilian schools (high school diploma or college degree) and military channels such as NMAA,

experience is gained through a career that is set up to be progressively more challenging and broad enough to create a professional leader

Afghan Army War College, Command and Staff College (CSC), and the Sergeants Major Academy. Finally, developing leadership capacity within the ANSF is based on experience. As in any security force, experience is gained through a career that is set up to be progressively more challenging and broad enough to create a professional leader.

Developing the Ministries of Interior and Defense

Improving the ministerial capacity to generate, train, equip, and sustain the ANSF is critical to a self-sustaining force. A lack of quality leaders, mid-level staff, and an efficient bureaucracy at the ministerial level poses challenges to accomplishing this, but these shortfalls are mitigated through dedicated advisors. Day in and day out, these advisors work with key leaders in the Ministries of Interior and Defense to increase their capacity and capability to generate, train, and sustain their forces. This has been done in three key areas: structural changes, crafting policies and laws (in support of Parliament), and developing a logistics system.

One of the most effective differences the ministries have had on the generation, training, and sustainment of their forces is through policies and laws. These have created a *tashkil* (a formal document detailing the size and composition of the force) and sustainable budgeting, funding, and procurement systems; and in the near future they will deliver a comprehensive personnel system that includes merit-based promotion, established career paths, and retirement systems.

One such policy instituted by the Afghan government is the ethnic balance of the ANSF. Both the ANA and the ANP have strict guidelines that the number of personnel from each ethnic group in Afghanistan is properly represented in their security forces. Of particular concern, given the fact that the insurgency is made up of fighters primarily from Pashtun tribes in the south, is the representation of that ethnic group in the ANA and ANP. Looking at the overall numbers, these policies have been very successful: 45 percent

of the ANA and 43 percent of the ANP are Pashtun, compared to 44 percent nationally. While the overall inclusion of Pashtuns has been successful, of real concern is the inclusion of Pashtuns from southern Afghanistan, as this is the demographic most hostile to the government and most likely to provide the insurgency with fighters. Specific recruitment programs have been instituted to increase their participation in the ANSF. The programs include radio marketing and billboards as well as recruiting teams led by a general from that area that assist in the formation of Provincial Recruiting Councils. These measures have been largely successful, increasing recruitment of southern Pashtuns in early 2011 to 3.3 to 3.5 percent per month. This still does not meet the MoD's near-term goal of the 4 percent necessary to fully integrate southern Pashtuns into the ANSF, but recruitment has been trending upward since late 2010, when all of the recruitment measures were instituted in earnest.

Finally, to sustain the force, the ministries have created a regional logistic system. This system has developed a Regional Logistic Center in each region, pushing supplies beyond the typical hubs in Kabul and Kandahar. There is still much to do in this area. Soldiers and police in the field are consistently short of supplies, from food to clothing. The first step will be to create a "push" system, where logistics planners identify what should be needed at each unit and push it to them, not waiting for a request. This system provides supplies to those in need before they otherwise would miss them. In the current "pull" system, units request supplies only when they are needed. There is no forecasting supplies they *will* need, so units often go without. This is unacceptable in any security force, and even more in one that is consistently in combat and facing an insurgency.

Each of these areas has gotten better because of the work of dedicated Afghan leaders, with the support of knowledgeable coalition advisors. There remains much to do, however, and advisor manning levels must continue to improve, increasing our support to a larger proportion of the Afghan leadership. Ministerial development is the most important aspect of building enduring capacity for the ANSF, and we must treat it that way.

Improving Afghanistan's Human Capital

Literacy and leader development are critical to ensuring that the partner capacity—

building activities we conduct in Afghanistan are enduring. They are the foundation upon which the future capacity and capability of the security sector will be built.

In the same article in which Secretary Gates called for an increase in our ability to conduct partner capacity-building missions, he also stated, "There has not been enough attention paid to building . . . the human capital (including leadership skills and attitudes) needed to sustain security over the long term."⁵ We have recognized the severe shortage of human capital in Afghanistan, particularly for leaders. Increasing this asset is a Herculean task. The human capital needed to recruit, train, equip, and sustain a security force and organize sustainable ministerial systems is severely underdeveloped. With literacy rates for the overall population at roughly 28 percent and among the ANSF recruits at less than 14 percent, there is a low educational base from which to draw. This affects both the training of soldiers and police and their job performance once training is complete.

When NTM-A was activated last November, it was clear that illiteracy was affecting the speed and depth of instruction. Training had to be provided through hands-on instruction—each element had to be demonstrated. The inability to provide written material to "prime the pump" for instruction means every new block of instruction must start from scratch.

Even more important than improving training, illiteracy affects the professionalization of the ANSF. Key elements of job performance for capable security forces are tied to the basic ability to read letters and numbers and to write. How do we professionalize a soldier who cannot read a manual on how to maintain a vehicle, read a serial number to distinguish his weapon from another, calculate trajectory for a field artillery call for fire, or write an intelligence report for a higher command? How do we professionalize a policeman who cannot read the laws he is enforcing, write an incident report, or sign a citation? How can the rule of law be enforced if he cannot build a case based on written evidence? How can either a soldier or policeman ensure accountability of both superiors and subordinates if he cannot read what equipment his unit needs or a pay chart to know what he should receive?

Creating the highly structured systems that are needed to run complex organizations

within the security sector requires literacy. An educational foundation must be established to create the literate security forces and ministerial bureaucrats who can be trained to run district, provincial, and national institutions effectively. Unlike previous voluntary literacy training efforts, we are beginning the process by providing mandatory literacy training to all soldiers and policemen. From basic training to unit training, and including educational facilities like the National Police Academy and NMAA, we are moving the ANSF from illiteracy to basic functional and then advanced literacy.

Investing in Physical Capital

The development of ANSF capacity requires significant physical (infrastructure) and economic (funding to build industries) support. This has made NTM-A the largest foreign investor in Afghanistan. Investment in everything from construction of training centers to boot factories, from literacy teachers to food procurement through the Afghan First, Afghan Made Initiative, is creating ripple effects across Afghan society.

Money that is now spent in the Afghan military industrial complex is jump-starting industry. Manufacturing companies in the private sector have begun making boots, uniforms, and other items for soldiers and police. These companies and those like them could just as easily transition from military to civilian goods. Workers making boots and uniforms can make shoes and clothes for sale on the open market. The huge investment that the international community is providing for the Afghan military base, whether in the ANSF or the civil base that supports it, is building more than just the capacity of the ANSF. It is also building the human and physical capital required to jump-start the Afghan economy and society.

Obstacles

There have been and remain significant challenges to NTM-A accomplishing its mission to build Afghan capacity and ensure that GIRoA is able to sustain it. Systems within the U.S. Government must be addressed to ensure that future efforts to increase the capacity of critical security forces will be successful. Inflexible personnel systems and inappropriate approval and funding structures must be improved to better provide for this mission.



U.S. and Afghan National Army soldiers secure landing zone during air assault mission in Sarobi district, Afghanistan

U.S. Army (Zachary Burke)

Personnel systems within the U.S. military are not designed to support building capacity within partner nations. The systems do not possess the flexibility or selectiveness needed to identify required skill sets and deploy personnel to the right positions. As stated earlier, one of the greatest impacts we have on building partner capacity is through our provision of advisors to the security ministries. There are no current processes within our personnel systems to ensure that we select the leaders with the right rank, skills, and temperament to serve in these positions. The majority of selections for trainers, instructors, and advisors are ad hoc; these billets are primarily filled with personnel who need a deployment and have the correct rank. Skills and experience are rarely determining factors.

Beyond personnel issues, our current structures for funding and authorities are inappropriate. Within the U.S. Department of Defense (DOD), we largely possess only authorities and funding to support military forces. This is also true of most NATO countries. When NATO gives multinational support, this, too, delivers only military and/or defense forces. In the Afghan environment, and in most areas where we would be building partner capacity, the police may be more important than military forces. To truly bring stability to an area and build partner capacity, the ability to support interior forces (police and gendarmerie) is essential.

In addition to governmental funding, the ability to acquire private sector support is also required. Building partner capacity,

as described previously, calls for more than just teaching how to shoot a weapon or arrest a criminal. Building human and physical capital to professionalize security forces is just as important. We currently do not have the ability to secure funding from the private sector without a lengthy and laborious contracting process. We need the authority to match the right capability within the private sector with the requirement in the partner nation. Sometimes this may mean only one company can deliver specific capabilities; the operational context occasionally demands that speed of delivery take precedence over peacetime contractual regulations.

Solutions

To fully implement the U.S. National Defense Strategy and policy put forth by Secretary Gates to build partner capacity, we must make significant changes. Our personnel system must be able to identify and select the appropriate personnel to train, instruct, and advise other nations' military and police leaders. These jobs must be treated with the same importance as equivalent jobs within our own Services. Advisors in particular should go through a selection process similar to those being selected for advisor positions in DOD. An advisor for a Minister of Defense or Minister of Interior should be selected based on the same criteria used for the military advisor to the Secretary of Defense. These advisory positions are critical nodes for building partner capacity. The training for these advisors should also be commensurate

our personnel system must be able to identify and select the appropriate personnel to train, instruct, and advise other nations' military and police leaders

with their critical effect in building partner capacity. This training must include courses that impart advisory skills (particularly at the ministerial level), language, culture, and scenario-based exercises, which teach through challenging situations.

The authorities and funding provided to forces that are building partner capacity must be better tailored and more flexible. The Afghanistan Security Forces Fund should be given greater flexibility. There are more ways to support and build the ANSF than just buying equipment or building facilities. The greatest effect we can have is by partnering and advising. We need the flexibility of funds to support coalition forces to provide these capabilities.

Many solutions to NATO's structure and orientation have been addressed in the recently published paper on the new strategic concept.⁶ First, NATO must orient itself not only to provide security for its members, but to "place a premium on helping host nation security forces to improve their own ability to maintain order and to protect non-combatants from harm."⁷ This reorientation will protect member states before threats come to their shores. Building partner nation capacity will "require working with an effective mix of partners to piece together the diverse elements of a single shared strategy."⁸ This strategy must include interior forces (police and gendarmerie) and those with the capabilities to develop them. NATO must also "review [their] financial rules"⁹ to include the funding and support of these interior forces. Finally, NATO nations must "minimize national caveats that they attach when contributing troops to Alliance operations."¹⁰ These caveats can damage efforts in Afghanistan, and will do the same in future efforts if not kept in check. All NATO nations want to ensure the safety and security of their personnel, but they must also ensure that caution does not hinder the ability to accomplish the mission. During a mission that includes building partner capacity, training

in dangerous areas and partnering with host nation forces are highly probable. Caveats must be kept to a minimum to allow a greater probability of success.

Much progress has been made filling NATO trainer shortfalls as well as filling positions to the appropriate rank, skill, and knowledge. From the aftermath of the Lisbon Summit in November 2010 to the release of our current statement of requirements, NTM-A saw an addition of approximately 440 coalition trainers, a 45 percent increase. These trainers came from 15 partner nations, increasing the overall national contributions to the training mission to 32 nations. These trainers have been invaluable to the improvement of specific skills within the ANSF, particularly the operation and maintenance of Russian-made aircraft (for example, Mi-17 cargo helicopters) and policing skills (with personnel trained by national police forces like the Italian Carabinieri, the French Gendarmerie Nationale, and the Royal Canadian Mounted Police).

Finally, forces that are building partner capacity must be given a more flexible system to engage with the private sector. A quick and flexible system must be created to approach and procure support and funding from private sector organizations, whether a nongovernmental agency, corporation, or university. Building partner capacity requires the authority to match the right capability within the private sector with the requirement of the partner nation.

In for the Long Haul

Ultimately, the task of building the capacity of the ANSF is a "duel in strategic endurance"¹¹ with both the insurgent forces and the international community. The duel with the former sees insurgents trying to wait us out, while the international community is trying to determine the best way to support the effort while moving toward the exit. In contrast, NTM-A, in some form or another, will have an enduring presence supporting the ANSF. Whether it evolves into an Office of Security Cooperation like those in our Embassies across the globe or something more robust and far-reaching, America will have a significant military relationship with Afghanistan for years to come.

Recovery from 30 years of warfare does not occur in 1 year or 3. Political patience and a large initial investment in building capacity are needed to restart an Afghan society

and economy ravaged by sustained conflict. The payoff for this patience and investment is a professional security force that is able to provide security, creating room for the foundation of prosperity and stability that will support subsequent generations for decades to come, and providing a reliable ally to support a positive influence in the region.

No matter how the political winds may blow in the future, whether here in the United States or among our coalition partners, we must leave the Afghan people with an enduring capability and force generation capacity to provide security. By educating and developing the Afghan National Security Forces, we ensure that Afghanistan will be safe in the hands of a security force that won't leave—their security force. To deliver this education and development, we need a reenergized and reapplied focus within the U.S. Government and DOD, dedicated to building our partners' capacity across the globe. **JFQ**

NOTES

¹ Anders Fogh Rasmussen, monthly press briefing, June 7, 2010, available at <www.nato.int/cps/en/natolive/opinions_64083.htm>.

² Department of Defense (DOD), *National Defense Strategy* (Washington, DC: DOD, June 2008), 15.

³ Robert M. Gates, "Helping Others Defend Themselves: The Future of U.S. Security Assistance," *Foreign Affairs* (May–June 2010), 3.

⁴ David J. Kilcullen, *Counterinsurgency* (Oxford: Oxford University Press, 2010), 58.

⁵ Gates, 4.

⁶ "NATO 2020: Assured Security; Dynamic Engagement," Analysis and Recommendations of the Group of Experts on a New Strategic Concept for NATO, May 17, 2010.

⁷ *Ibid.*, 32.

⁸ *Ibid.*, 22.

⁹ *Ibid.*, 34.

¹⁰ *Ibid.*, 32.

¹¹ Anthony Cordesman, "Realism in Afghanistan: Rethinking an Uncertain Case for the War," Center for Strategic and International Studies, June 16, 2010.



7th Special Forces Group Soldier watches Dominican commandos enter building during joint assault and close quarters battle training in exercise Fused Response

U.S. Army (Alex Licea)

A Road Map for Beating Latin America's Transnational Criminal Organizations

By MARTIN EDWIN ANDERSEN

The brotherhood of the well-intentioned exists even though it is impossible to organize it anywhere.

—ALBERT EINSTEIN, 1934

The challenges posed by transnational criminal organizations (TCOs)—networks that meld international syndicates with domestic gangs for greater and deeper illegal reach—today cut a searing path through Latin America's political, social, and economic landscape, morphing what once seemed strictly law enforcement problems into national security threats. At the same time, throughout the region, a fierce debate has arisen about the efficacy and appropriateness of military versus law enforcement responses, and combinations of the two, thrust into this violent chasm. In

an extensive survey of people's sense of trust in national police forces around the Americas, the respected Americas Barometer found—not surprisingly given the region's racial and ethnic stratification—a “positive correlation between self-identifying as white (compared to all other groups) and trust in the police.” Other factors, it reported, “such as a history of crime victimization, fear of crime, and victimization by corruption contribute negatively to people's perceptions.”¹ Add the fact that in most countries of the region police forces are dramatically underpaid and underresourced, while facing criminal groups of sophisticated

organization and high-octane lethality, and it is clear that much has to be done.

To combat TCOs, criminals, terrorists, and their quasi-legal facilitators need to be confronted by an integrated law enforcement, intelligence, and military effort as part of a “whole-of-government” approach. As such, desired state objectives are pursued through the government’s use of formal and/or informal networks across the different agencies under its control to coordinate the design and implementation of the range of interventions that those agencies can and will make to increase effectiveness. This new emphasis, in which the police and military are integral parts of a larger effort, would foster collaboration and reinforce (and—where needed—create) communities of interest at national, regional, and international levels. The whole-of-government approach needs to be accompanied by a whole-of-learning model in which U.S. strengths and weaknesses can be shared and frankly discussed for the benefit of tomorrow’s security and defense policies within a democratic framework.

For many in Latin America, state power has historically cast a shadow on both personal security and human rights. The debate about its ultimate ownership, purposes, and outcomes continues. The legacy of state security forces in most countries is one in which political rights and civil liberties were severely conditioned or were perhaps the object of full-scale assault for some of the population—a painful inheritance that mobilizes citizens to demand greater respect for democratic practices. At the same time, the globalization of crime brings with it an enhanced potential for lethality and reach that demands increases in the capabilities of state institutions. In Mexico, where some 150,000 people are involved in a narcotics business that has spilled over into about 230 U.S. cities, the challenge has become so acute that the government has had no alternative but to call in the military, particularly given a level of police corruption and institutional deficiencies that may take a decade or more to overcome, if it ever is.²

From the Rio Grande to Tierra del Fuego, the wide range of irregular and

asymmetric challenges includes nonstate actors competing for territorial control or advancing their illicit agendas by providing public goods in the absence of weak or ineffective national and local governments. The multidimensional TCOs’ threats include narcotics trafficking, financial crimes, cybercrimes, corruption and extortion, counterfeiting, and trafficking in humans and arms. Equipped with sophisticated weapons and other technologies that enable them to train a path of destruction on all that is in their way, these transnational actors are multibillion-dollar businesses whose resources often dwarf those of national governments. Their dirty money can buy elections, politicians, and power itself.

This organized savagery has a global reach that outstrips the power, resources, and imagination of many law enforcement agencies. Illicit traffic from one continent can traverse a second on its way to being sold in a third—unchallenged when it is not detected. The innovation of transnational communications has helped international organizations and multinational corporations to act with greater independence of national borders and international regulations. TCOs have also been able to take advantage of these new opportunities to lay waste to the common good. These heterodox threats—such as the narcotics trade, smuggling, piracy, and human trafficking—are felt across the public spectrum, by individuals, communities, governments, and nations themselves.

The powerful criminal networks in Mexico, Colombia, Venezuela, Brazil, and Central America—and growing threats elsewhere—have come to resemble multinational felonious insurgencies, with their size and the violence they can bring to bear challenging not only a growing number of civilian governments and civil societies throughout the hemisphere, but also the concept of national sovereignty itself. As Brookings Institution expert Vanda Felbab-Brown recently noted in testimony before the U.S. Congress, Mexico’s paramilitary narco-cartel, the Zetas, and Brazil’s Comando Vermelho:

seek to dominate the political life of a community, controlling the community’s ability to organize and interact with the state, determining the extent and functions of local government, and sometimes even exercising quasi-control over the local territory. Thus they too can represent an intense and acute threat to governments, at least in particular locales. . . . A newer, and

transnational actors are multibillion-dollar businesses whose resources often dwarf those of national governments

particularly dangerous, development is the effort by Mexican [drug-trafficking organizations, or DTOs], such as the Zetas and the Sinaloa DTO, to themselves control territory in transshipment countries of Central America.³

In Mexico, in particular, narcotics organizations field paramilitary units with weapons of war that—in a perverse replica of the role of the Colt revolver of the American Wild West—equalize and sometimes trump the firepower of the legal forces.⁴ This assault on the legitimate monopoly on the instruments of violence can lead to weak or failed states. And as each nation feels the brunt of these growing threats, new “security dilemmas” emerge in which one state’s efforts to maximize its own security create inexorable perceptions in its neighbors of greater insecurity, resulting in increased tensions (witness recent and ongoing border friction between Colombia and Venezuela, for example, or between Costa Rica and Nicaragua).

The endemic problems associated with the region’s law enforcement institutions, long a Gordian knot affecting social development and stability, mean that neither local police nor border patrols—even when buttressed by class-circumscribed private security institutions—are empowered and equipped to match the threat. Into the vacuum, in several countries of the region—Colombia, Brazil, and Mexico, among others—vicious militia groups “pose significant threats to both communities and the state, even while presenting themselves as protectors of the citizenry against crime.”⁵

During a time of rapidly expanding transnational criminal networks, security solutions being pursued in a number of Latin American countries—most notably in Argentina—offer community-based, decentralized remedies. Inhibiting clear-eyed responses to these real and present dangers in many countries is a bipolar reaction by both the public and by special interest groups that pits memories of recent military-led dictatorships and the fear that such regimes could reemerge in the current context against public outrage and feelings

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of impotence in the face of corrupt and ineffective civilian institutions.

Some human rights groups, rooting their critique in the manner in which U.S. security assistance was given during the Cold War, put priority on the first focus—warning that Washington should do no harm by only offering assistance with no potential for dual-use by would-be military dictators. They demand that aid from Washington strictly reflect what they insist is how North American institutions operate.

“Preach what you practice,” the influential Washington Office on Latin America (WOLA) recently demanded, charging that even today U.S. foreign assistance practices often “encourage Latin America’s armed forces to take on internal security roles that the U.S. military cannot legally play at home.” Not all those worried about today’s risks to democratic civilian institutions share the thrust of the critique, however. For instance, a civil libertarian supreme court justice in Argentina, noting the marked trend toward keeping armed forces at the margin of security roles, finds the police a greater threat to democratic rule. He counters, “Today coups are done by the security forces, not by armies.”⁶

Once backburner questions associated with a handful of countries undergoing democratic transitions in the 1980s and 1990s, such as Argentina, El Salvador, Panama, and Guatemala, the issues of crime and civil-military and police-community relations have become searing priorities. Consider:

In Mexico, a “narcologopoly” where in 2010 drug trafficking–related deaths numbered more than 11,000 people, municipal police around the country are paid off by narcotics traffickers with an estimated \$100 million a month. The cartel money, noted Minister of Public Security Genaro Garcia Luna, “is the part of a salary that the State doesn’t pay the uniformed officers so that they can live in dignity.” Meanwhile, the Mexican cartel, Los Zetas, themselves former soldiers trained in counterinsurgency, are recruiting Guatemalan exmilitary elite—los kaibiles—and training with them on Guatemalan territory.⁷

Along the Central American isthmus, where the narcotics trade and gang violence rival Mexico’s bleak insecurity panorama, Costa Rica’s long-simmering border dispute with Nicaragua almost broke into full-scale fighting in 2010. Having abolished their



U.S. and Brazilian special forces soldiers prepare to fast-rope from UH-60 during combined training at Fort Bragg

7th Special Forces Group, Airborne (Gino Palu)

military and entrusting their national sovereignty to volunteer militias and international law since 1948, the dispute caused Costa Ricans to rethink the wisdom of not having an army, particularly after its heavily armed police sent to the border reportedly suffered a “profound fear of fighting against Nicaraguan soldiers.”⁸

Along Nicaragua’s poor and isolated Mosquito Coast, indigenous peoples who formed a pillar of anti-Sandinista resistance in the 1980s, only to be largely abandoned to their own poverty later, find their lands and waters a hub of transnational narcotics shipments. The burgeoning local narco-economy has led separatist Miskito Indians to formally consider using the drug money for local needs. “We also have the right to use these resources,” states one indigenous leader, ignoring both traditional values and the public health risks that such trafficking entail. “The laws that prohibit it are the laws of Nicaragua and not the laws of the indigenous people.” Meanwhile, long-time Miskito foe and strongman President Daniel Ortega claims the high road for leading the subregion in drug arrests and seizures.⁹

In Ecuador—between neighbors to the north and south that are major contributors to world narcotics trafficking—a climate of insecurity resulted in the president calling in the military to participate with the police in efforts to quell land invasions and the

proliferation of weapons. The “complementary” role of the military, noted General Ernesto Gonzalez, chief of the armed forces joint command, will last until “the police reorganize and have the operational capacity that we want.” The drug lords, he added, have enormous power that can put the security of the state at risk.¹⁰

In Argentina, a country plunging into the front ranks of regional narcotics transit as well as personal consumption, a government palpably distant from its own police forces insists on a program of demilitarization, decentralization, and “democratization” of law enforcement. Claiming their efforts are reflective of the U.S. model of *posse comitatus*, government officials and their citizen allies state their opposition is strongly rooted in fears of returning to a situation where the military not only eventually subordinates the police under its command, but could use them once again in extraconstitutional efforts to take power.

once backburner questions associated with a handful of countries, the issues of crime and civil-military and police-community relations have become searing priorities

U.S. Air Force (Jerry Morrison)



Secretary Gates and Chilean defense minister talk during break at Conference of the Defense Ministers of the Americas in Bolivia

Faced with evolving security challenges that range from common crime to guerrilla insurgents, Latin American policymakers are finding that traditional police and military institutions are particularly ill-equipped to beat back intermediate threats, such as narco-cartels, other TCOs (including organized criminal gangs and arms-traffickers), and terrorists. Despite the occasional flaring of border tensions, the region remains essentially a “zone of peace” when it comes to interstate conflict, calling into question in cash-strapped countries conventional missions for large standing armies. At the same time, midlevel threats characterized by extreme violence, with easy access to manpower, large sums of money, and sophisticated weapons, overwhelm regular law enforcement capabilities. This includes Central American criminal gangs, narco-syndicates such as the Mexican cartels, narco-terrorists (*Sendero Luminoso* in Peru, the Revolutionary Armed Forces of Colombia [FARC]), and others.

Midlevel threats are not only those posed by organized criminal groups. In what

might be called the low-intensity democracies of the region—characterized by weak democratic institutions, rampant corruption, and social institutions monopolized by economic elites unreflective of their countries’ racial and ethnic makeup—civilian insurrections and land occupations (a primary source of conflict) are also a problem. When uncontrolled, these uprisings—often based on legitimate demands not fairly channeled through the political system—can significantly add to regional instability. In a democracy, these challenges in particular require deft management by the forces of order, even when those protesting operate outside the law. When the state is unable or unwilling to exercise control over territory, the risk grows of communities coming to depend on—or, like in the case of the infamous Colombian drug czar Pablo Escobar, becoming supporters of—criminal enterprises and illegal economies.

The term *ungoverned spaces* favored by geostrategists makes more sense when understood in terms of state failure to respond to street crime, consistent lack of access to

judicial recourse and informal dispute resolution, and the absence of education and health care facilities. Within this context, law enforcement remains the key to a state’s assertion over national territory. However, since “trust in the police force is important because security is one of the principal directives of a sovereign state,” pollster Mitchell Seligson notes that there is “a general sense of distrust in the police within the Americas” that is all the more worrisome.¹¹ Meanwhile, citizen-reformers’ emphasis on democratizing and decentralizing the police while leaving only external defense missions to the military creates growing security deficits that tend to increase the insecurity of frightened and largely, although not entirely, defenseless publics.

Mirandize vs. Vaporize

Today, police reform advocates throughout Latin America seek to respond to demands for public safety by promoting community policing models. Although it is ill suited to carry out the organizational heavy lifting that fighting transnational criminal organizations requires, such advocates argue that community policing helps to demilitarize, democratize, and decentralize law enforcement institutions, putting an operational emphasis on agents’ in-the-field judgment and greater control over the use of force. Calls for demilitarization are based in large part on bitter memories of military institutions not only engaging in human rights violations, but also exercising their tutelage over the security forces, both in the region’s troubled democracies and in the armed forces’ politicized ascent to power through the front door of the presidential palace. In this context, police work has been seen as inferior to that of military missions, and the police are treated as *hermanos menores* (“little brothers”) by their armed forces colleagues. The functional superiority of the military, where its members often held the most senior posts in law enforcement agencies, historically has exacerbated frictions between the armed forces and police. This has usually resulted in the latter feeling relegated to a lesser status in their own institutions.

The military emphasis was also of questionable value in winning necessary support in the populace. People understood that in developed democracies, the police were to use the minimum force needed to apprehend (or “mirandize”) suspects, while armies around the world used maximum force to (“vaporize”) enemies. Regional police forces were also

the term ungoverned spaces makes more sense when understood in terms of state failure to respond to street crime, consistent lack of access to dispute resolution, and the absence of education and health care

in the front lines of U.S.-supported counter-insurgency campaigns in the 1960s and 1970s against leftist guerrillas and other dissidents, using tactics ranging from illegal surveillance to unlawful detention and torture. Police collaboration with the military resulted in the detention of hundreds of thousands of political foes, some armed, others not. As former Colombian President Alvaro Uribe recently noted, military-oriented national security doctrines from that time, and the institutions and practices that were the result, drove a wedge between the armies and security forces and the populations they were supposed to serve and protect.¹²

With the swing back to democratic rule in the 1980s and 1990s, regional police forces were largely separated from the military and were placed institutionally under the control of ministries of interior and public security, rather than defense. Argentina established a strict legal firewall between national defense and internal security and assigned only police and security forces to the latter. Panama, and later Haiti, followed Costa Rica and eliminated its military entirely. At the close of a particularly vicious civil war, El Salvador created a new National Civilian Police force that, in the beginning, was the sole guardian of internal security.

In these and other countries, significant efforts were made to move away from the military inheritance of centralized command and control, as well as the structures, subcultures, and institutional loyalties innate to armed forces organization. Nonetheless, these efforts have not in and of themselves assured police professionalization and an end to either rampant corruption or extra-legal violence, as the failure in Central America of various *mano dura*—heavy handed—law enforcement approaches to criminal gangs has shown. In too many countries, police forces still have military-like organization but without the traditional capacity of armed forces, a recipe for failure in today's challenging environment.

In recent years, the civilian leadership of a number of countries has found they have been forced, by necessity or convenience, to involve or reintroduce the military more in internal security. In March 2008, the Bolivian government enacted a decree giving the military a key role, including arrest powers, in customs enforcement and confiscating contraband at the borders, despite growing friction with the police.¹³ And in Brazil, "the growing militarization of those operations

meant to guarantee public safety," where "the functions of national defense have merged dangerously with the maintenance of internal order," has led to a series of public safety scandals embarrassing to the Brazilian army.¹⁴ El Salvador's separation of police and military roles, with the former charged with internal security, withered under the threat of well-armed transnational criminal gangs.

The emphasis on "civilianizing" the police draws much inspiration from the police reform efforts undertaken in the global north during the 1980s and 1990s, in which forces were taken out of heavily armed patrol cars in favor of "community-based" initiatives. At the most functional level, strong arguments can be made that, by bringing law enforcement closer to the community, the police—particularly in intelligence-gathering—can maximize citizen cooperation and shared risk. In addition, the efforts of professionalized police forces within the context of a whole-of-government approach can be seen as having had a dramatic effect in one of the most notorious instances of organized crime—that of the Sicilian mafia.

Like other TCOs, the mafia has been a complex organization with global reach that penetrates the state, private financial institutions, and religious organizations while creating a myth of an invincible counterculture of illegality. Before Palermo Mayor Leoluca Orlando took office in 1985, mafia-related murders in the city numbered more than 240 a year; his predecessor belonged to the shadowy illegal organization, and two famed anti-mafia judges whose names were on a mob hit list were murdered, with Orlando's own name the third on that roster. Orlando would not allow his wife or children to be photographed or seen at his side for fear they would be killed.

In response, Orlando enlisted citizens in the promotion of a culture of lawfulness and human rights. Rather than combat the threat with counterinsurgency strategies, Palermo's successful assault of the mafia featured a fight against impunity that included strengthening democratic governance and participation. Orlando described the approach with an analogy of a cart with two wheels—the first, the wheel of legality, represented law enforcement; the second, the wheel of culture, included other community organizations such as the church, schools, and the media. Both wheels, he claimed, need to move at the same speed, with law enforcement being necessary

by bringing law enforcement closer to the community, the police—particularly in intelligence-gathering—can maximize citizen cooperation and shared risk

but not enough by itself. "Our past is rich of glory, it is not only [a] shame," Orlando stated of his fellow Sicilians, adding (in an aside as valid for the millions of indigenous peoples living in or alongside ungoverned spaces in Mexico, Guatemala, Nicaragua, and Peru as it is for citizens of the *mezzogiorno*) "if you want to fight identity criminals you need to promote your identity."¹⁵

The Palermo model has already been used successfully in Colombia, but only within a larger context that included military participation in the regaining of public spaces. Orlando played a key role in advising Medellín Mayor Sergio Fajardo, whose own efforts at promoting local civic participation helped to significantly reduce violence in a city once synonymous with narcotics-related mayhem and murder. The Medellín example points to the necessary context provided by a whole-of-government approach, pioneered through President Uribe's "democratic security" strategy.

Like Mexico today, Colombia faced being overrun by a "narcoligopoly" that included not only drug cartels, but also Marxist insurgents such as the FARC and right-wing death squads. Previously, when the military entered into ungoverned spaces the FARC had controlled for years, it could drive out the guerrillas usually only as long as they remained *in situ*. They found that security alone, while essential, was not enough. The FARC provided public goods that could only be challenged by the state; the latter brought in the ministries of justice, education, public works, public health, and others. Uribe used the military and police to consolidate control of Colombian territory, promoting democratic civilian oversight of the armed forces while at the same time initiating a wide range of political reforms to dramatically increase government efficiency, transparency, and accountability. The assertion of control over areas previously ungoverned by the state enabled a whole-of-government effort, out of which the population could be protected and mobilized against violent and illegal antigovernment forces.

*democratic, community-based
policing brings to the table skills
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criminal organizations*

Another example—that of Rio de Janeiro—also underscores the need for an approach in which security is part of an integrated effort that creates social capital (that is, social relations that have productive benefits). Brazil was recently ranked by the Pan American Health Organization as the sixth most violent of 100 countries, with 20 murders per 100,000 residents. In one of Latin America's most dangerous cities, residents of Rio de Janeiro's sprawling slums—*favelas*—and those forced to commute daily through them were terrorized by heavily armed drug gangs wearing Bermuda shorts and flip-flops. The fear and mayhem is a special preoccupation given that the city is to host a number of world events, including the Rio Plus 20 Earth Summit in 2012, 2014 World Cup, and 2016 Summer Olympics. Beginning in 2007, with the police taking back smaller *favelas* from thugs carrying Kalashnikovs, the state reasserted itself block by block. During November 2010, the government began its most ambitious effort to “pacify” the slums by launching a massive military and police operation—a “shantytown counterinsurgency.” The security forces stormed and then occupied two enormous *favelas* where 200,000 people lived, setting up a permanent police presence. By integrating themselves into the communities, the specially trained police established permanent state control of the city's most dangerous neighborhoods. Although police brutality remains a problem that is only slowly being addressed, by bringing a palpable sensation of security and safety to the one-time no man's land, doctors, social workers, teachers, and other government employees are able to return, creating again the minimal conditions needed to generate social capital.¹⁶

Hybrid Models

Democratic, community-based policing brings to the table important skills that, in a whole-of-government approach, can significantly enhance the fight against transnational criminal organizations, particularly when coupled with other improvements such as judiciary reform and anticorruption efforts.

The intimate knowledge of the territory that the police patrol, their use of force with restraint, their skills at defusing threatening situations through mediation—all of these help them to be seen as citizen protectors. So do their rules of engagement: principles of necessity (react with violence only when attacked), proportionality (meet threats according to their magnitude, duration, and intensity), rationality (do not provoke and, where possible, use nonlethal methods first), and discrimination (know how to separate violent protestors from the rest).

At the same time, and for some of those same reasons, the type of community policing promoted by democratic reformers is ill prepared to take on TCOs or other powerful criminal networks. Their small unit size, lighter weapons, greater exposure, and decentralized structures work against them. Clearly, when faced with sustained and truly dangerous threats, specialized (and centralized) capabilities are needed. When the existence of the state itself is imperiled, or even when violent crime rates soar, military participation is sometimes required.

In Latin America, however, the emergency decrees that come with calling in the armed forces generally lean heavily in favor of security and against civil liberties. The challenges are even greater when the threats form part of urban society, so that the state's use of its monopoly on violence must be matched with Solomonic restraint in favor of innocent life. Furthermore, militaries rarely have the training to carry out internal security missions within the framework of law. (While groups such as WOLA are mistaken when they suggest that within the *United States Posse Comitatus Act of 1878* [18 U.S.C. Section 1385] is an almost unsurmountable barrier to American military participation in law enforcement, the 133-year-old law did over time help keep the Armed Forces out of domestic law enforcement and, by extension, partisan politics, while allowing for the development of professional civilian policing, mostly at the local level.) Perhaps the most difficult tight-wire act of all is that if militaries participate in internal security—remolding their training and updating their doctrine without well-defined “sunset” provisions—moving the armed forces back into the barracks when the threat recedes is a bet many civilians are shy to take.

Calls for reform, recent past history, and the unexpected virulence and reach of

organized crime for most Latin American countries pose difficult choices and uncertain futures. In some nations, for example Chile and Argentina, the gap between the police and military is filled by hybrid security forces uniquely qualified to take on intermediate threats, having both internal security and national defense missions. Although centralized and organized hierarchically with military capabilities when needed, the Chilean *Carabineros* and Argentina's *Gendarmeria Nacional* are well educated in police science and have as their primary peacetime mission the maintenance of public order.

In both countries, the *Carabineros* and *Gendarmeria* receive high marks for conduct in duties ranging from controlling borders to handling public disturbances, while playing important roles in the fight against organized crime and narcotics trafficking. In Chile, which ranked highest in the Americas in a region-wide poll of citizen trust in the national police, the *Carabineros* use highly skilled social communication as a way of maintaining an ongoing dialogue with the people, and their recruits are subject to extensive background checks before they can enter the force. In the case of Argentina, where the *Gendarmeria*, created in 1938, has been in the forefront of controlling disturbances by jobless protestors trained in erecting strategic roadblocks in major metropolitan areas, the force has won praise for its skill and restraint. It is, notes one U.S. scholar, “deeply empathetic with protestors, and highly respectful of what they consider their fellow citizens' human rights.”¹⁷

A Key Ingredient

The United States can play an important role in promoting whole-of-government approaches to asymmetric security and defense challenges based on its own experiences and vocation to participate in communities of interest at national, regional, and international levels. Together the United States and its regional friends and allies need to share their experiences in coordinated, integrated, and mutually supportive efforts reaching all sectors of the states, as well as among nations. As Secretary of Defense Robert Gates has stated about U.S. security assistance, effectiveness and credibility will only be as good as the effectiveness, credibility, and sustainability of our local partners. In this regard, building partner capacity, including the sharing of research and education as

Sailors show Dominican Republic Defense Forces proper way to maneuver rigid-hull inflatable boat during subject matter expert exchange



U.S. Navy (Rachael L. Leslie)

building partner capacity is key—particularly in terms of international coordination, cooperation, and collaboration

well as experiences, is key—particularly in terms of international coordination, cooperation, and collaboration.

Other U.S. Government departments also have an important role to play. Several dozen law enforcement agencies provide tens of millions of dollars in training around the hemisphere. Police training, however, only goes so far, as those trained do not always remain in their jobs—a key problem in many poorly paid law enforcement institutions in Latin America. More than police training, police development—the creation of institutions and sustainable practices—is needed, and here is where significant improvement is required.

At the end of the Cold War, the U.S. Justice Department's International Criminal Investigative Training Assistance Program (ICITAP) was well positioned to carry out police development in many emerging democ-

racies around the world. Led by a dedicated team of Federal Bureau of Investigation (FBI) professionals, ICITAP played key roles in the creation of national police forces in El Salvador and Panama, and carried out successful reform operations in several other countries as well. By the mid-1990s, however, control of ICITAP was wrested away from the FBI. In its place, ICITAP became a second job largely for ad hoc teams of retirees mainly from different U.S. municipal, county, and state police forces, whose community-based policing experience was touted as better than the FBI hierarchical law enforcement model.

At the same time, political considerations meant that several promising or successful police development efforts begun under FBI leadership, including that in El Salvador, were stripped of manpower and resources in order to curry favor with image-conscious senior officials in the Justice Department who wanted to be seen as building security forces in an impoverished postdictatorship Haiti that could not in fact sustain their efforts. And following the end of the decades-long civil war in Guatemala, broad community support existed for the abolition of the notoriously corrupt and brutal

National Police and its replacement with a new force modeled after that in El Salvador. Instead, ICITAP led an effort to purge a limited number of National Police officers and subject the rest to limited training before being restored to their posts. More than a decade later, the Guatemalan police remain one of the biggest obstacles to effective prosecution of the war there against transnational criminal organizations.

The U.S. model does have much to offer. The juridical effect of the U.S. *Posse Comitatus* Act in restricting the authority of the military to conduct operations in the domestic arena or against U.S. citizens remains a matter of domestic debate. However, it may be that time-honored practices—reflecting as much the spirit as the letter of the law—are what sustain a successful civil-military relations model in the world's oldest democracy. Where the U.S. military has intervened in the domestic arena, such as in urban riot control, their participation has been both geographically and temporally limited, with soldiers' involvement carefully calibrated and monitored by civilian political oversight.

The Act and the principles it embodies do remain deeply imbedded in the U.S.

national political discourse, and they continue to serve as major fault line in the debate—in Congress, in the courts, and by members of the armed Services and police, among others—over appropriate roles for both the military and security forces in a democracy. At the same time, it should be pointed out in this age of international terrorism that the Armed Forces are not prohibited from acting against a foreign enemy in the U.S. domestic territory, and the oath of every U.S. military officer is to uphold the Constitution and defend it from all enemies, foreign and domestic. (In addition, the overwhelming predominance of local law enforcement agencies in the United States, which has the additional advantage of helping keep police corruption local rather than generalized nationwide, is not the model generally in use in the beleaguered countries of Latin America.)

Other examples are also relevant. Rio de Janeiro's current efforts to fight organized crime in its vast slums appear in some ways to resemble the "weed-and-seed" program of the U.S. Department of Justice. The community-based strategy sponsored by Justice—"an innovative, comprehensive multiagency approach to law enforcement, crime prevention, and community revitalization"—has for more than two decades helped local law enforcement take back crime-ridden areas (albeit less violent than Rio's slums) and supplied them with viable social safety nets and the chance to build social capital.

The examples of tribal courts and police on many American Indian reservations brings to mind Leoluca Orlando's dictum about the importance of social self-concepts: "If you want to fight identity criminals you need to promote your identity." It suggests that similar efforts might help in troubled democracies such as those of Bolivia, Peru, Ecuador, Guatemala, Nicaragua, and Mexico, where indigenous peoples both are an important percentage of the national population and live in or near areas favored by transnational criminal organizations.

Where the adoption of U.S. models are not appropriate, or are not applicable to local conditions, models from other countries can be shared. For example, Colombia's "democratic security" program is the object of study by many countries around the globe, as well as by its Latin American neighbors. In Chile, in many respects a regional "model," a recently launched neighborhood protection effort, *Programa Barrio en Paz Residencial*, seeks to

bring civil society into partnership with the *Carabineros* and the political authorities in 50 municipalities. Brazil, Colombia, and Canada also have important lessons to share while outside the hemisphere examples—such as Norway, Denmark, Germany, Britain, Italy, and Malaysia—raise new questions and offer new answers to our common deliberations. **JFQ**

NOTES

¹ Mitchell A. Seligson et al., eds., "Trust in the Police," *AmericasBarometer* Insights, no. 59 (2011), 1.

² Aldo Civico, "Hillary Clinton and the Drug Cartel Violence in Mexico," *Huffington Post*, March 14, 2009.

³ Vanda Felbab-Brown, "A Shared Responsibility: Counternarcotics and Citizens' Security in the Americas," testimony before the Senate Foreign Relations Committee, Subcommittee on the Western Hemisphere, Peace Corps and Global Narcotics Affairs, March 31, 2011; Julian Miglierini, "Tamaulipas: 'Failed state' in Mexico's war on drugs," BBC, April 14, 2011.

⁴ June S. Beittel, *Mexico's Drug-Related Violence* (Washington, DC: Congressional Research Service, May 27, 2009), 10–11.

⁵ The term *Gordian knot* in this regard was coined by Latin America historian Richard Millet; see Felbab-Brown.

⁶ George Withers et al., *Preach What You Practice: The Separation of Military and Police Roles in the Americas*, Washington Office on Latin America, November 2010; Martin Pique, "Entrevista con el Integrante De La Corte Suprema De Justicia Eugenio Zaffaroni," *Tiempo Argentino*, January 17, 2011.

⁷ Gabriela Calotti, "México, una potencia víctima de un 'narcoligopolio,'" *Agence France-Press*, April 12, 2011; "Narcos pagan a policías municipales mexicanos 100 millones de dólares al mes," *Agencia EFE*, August 6, 2010; E. Eduardo Castillo, "Cartel mexicano Los Zetas recluta ex kaidables por \$5,000," Associated Press, April 7, 2001.

⁸ Adam Williams, "Costa Rica foreign minister sparks army debate," *Tico Times*, January 13, 2011; "Costa Rica May Not Look at Nicaragua—or Itself—the Same Way Again," *InsideCostaRica*, March 9, 2011.

⁹ Tim Rogers, "Narco-Dividends: White Lobster on the Mosquito Coast," *Time*, April 14, 2011.

¹⁰ "El narcotráfico, una amenaza para FF.AA.," *El Comercio*, January 13, 2011.

¹¹ Seligson, 2–3.

¹² Uribe speech on "Leadership and Democratic Security," April 1, 2011, Center for Hemispheric Defense Studies, National Defense University, Washington, DC.


¹³ Andean Information Network, "The Bolivian Armed Forces' Growing Mission," June 1, 2008, available at <http://ain-bolivia.org/index.php?option=com_content&task=view&id=119&Itemid=32>.

¹⁴ Jorge Zaverucha, "La militarización de la seguridad pública en Brazil," *Nueva Sociedad*, no. 213, enero-febrero, 2008; see also Gary Duffy, "Judge Censures Brazilian Troops," BBC News, June 19, 2008; and "Lula 'indignant' over Army officers' alleged ties to killings," DPA, June 17, 2008. The news reports chronicled the fate of 11 army officers involved in anti-gang enforcement in Rio de Janeiro who allegedly turned over three youths to a local drug gang who later killed them. The BBC reported that in the wake of the killings, a judge referred to the army's "inability and lack of preparation" in guaranteeing order in the city, and stated that "using the military for this kind of operation violates the constitution [and likely intensifies] debate over exactly what role, if any, the army can play in helping to deal with Rio's complex security problems."

¹⁵ See Leoluca Orlando, *Fighting the Mafia and Renewing Sicilian Culture* (New York: Encounter Books, 2001); Civico; Kallie Jones, "Former Sicilian mayor speaks on Mafia," *Miami Student*, February 14, 2010.

¹⁶ See, for example, Mac Margolis, "Brazil's Top Cop," *Newsweek*, April 24, 2011; and Tom Phillips, "Rio's drive to remove drug gangs from slums brings calm to hospital A&E," *The Guardian*, April 1, 2011.

¹⁷ Seligson et al.; Eric Stener Carlson, "The Gendarmerie's Response to Social Protest in Argentina," in *Broken Promises? The Argentine Crisis and Argentine Democracy*, ed. Edward C. Epstein and David Pion-Berlin (Lanham, MD: Lexington Books, 2006), 198.



Sparks fly during production of mine
resistant ambush protected vehicle

DOD (Cherie A. Turby)

America's Endangered

Arsenal of Democracy

By M. THOMAS DAVIS *and* NATHANIEL C. FICK

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January 2011 marked the 50th anniversary of two of the most memorable Presidential addresses in American history. The more famous speech is John F. Kennedy's inaugural address of January 20, 1961, with its crisp cadence and ringing request that Americans "ask not what your country can do for you—ask what you can do for your country." The second speech is Dwight D. Eisenhower's Farewell Address delivered 3 days earlier. Like the man himself, Eisenhower's tone was measured, efficient, and businesslike. It is most remembered for his caution that "in the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist."

President Eisenhower likely never imagined that this one passage would be so long remembered. Yet because of its tenor, and the fact that Eisenhower himself was a product of the complex he warned about, the American public has subsequently held a lingering suspicion of the influence of the Nation's defense sector, an exaggerated impression of its size, and an insufficient understanding of the vital role it plays in national security.

Years earlier, President Franklin D. Roosevelt had referred to America's ability to build "more ships, more guns, more planes—more of everything" as the free world's "arsenal of democracy." Now commonly referred to as the defense industrial base (DIB), this arsenal has helped the United States emerge victorious in many of its wars, including the Civil War, World War I, World War II, and the Cold War. Though it usually escapes mention, elsewhere in his farewell speech President Eisenhower recognized the value of the DIB when he stated, "A vital element in keeping the peace is our military establishment. Our arms must be mighty, ready for instant action, so that no potential aggressor may be tempted to risk his own destruction."

Today, the DIB continues to be a vital strategic asset and an important source of advantage for the United States. As Barry Watts, the former Director of the Pentagon's Office of Program Analysis and Evaluation (PA&E), has written, if a nation had to choose a defense industrial base to serve its national interests, "the American military-industrial complex would surely be the one most people and nations would choose." It is, after all, the complex that not only has



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provided military equipment that is often the world standard, but also has stimulated the development of many technologies that are now a major component of modern American life, including high-performance jet aircraft, satellite communications, the Global Positioning System (GPS), high-speed computers, and even the Internet. Additionally, American aerospace and defense create the largest foreign trade surplus of any manufacturing sector, and constitute the second-largest export sector behind only agriculture.

Over the years, the DIB has indisputably given the United States a major strategic advantage, particularly since the massive mobilization required for World War II. The question today is whether that will continue in the years ahead. As a senior government

official recently noted, "Having a vibrant, capable defense industrial base is not a God-given right." The DIB is under stress as the American manufacturing base erodes, the vital engineering skills it requires become scarce, and tightening budgets reduce cash flows. Systemic flaws in U.S. military procurement processes, as well as past missteps by the DIB itself, have also contributed to the overall endangerment of America's arsenal of democracy during an age when rapid fielding of high-tech military equipment against nimble adversaries will increasingly determine whether the United States wins or loses wars. A primary national security challenge of the coming decade will be sustaining the arsenal of democracy so it is both viable and responsive to the needs of the Nation.

the DIB is under stress as the American manufacturing base erodes, as the vital engineering skills it requires become scarce, and as tightening budgets reduce cash

Origins of Power

Throughout its history, the United States has enjoyed several significant strategic advantages. Foremost are the oceans that shielded both coasts once the Nation achieved continental size, enabling the United States to ignore the threat of major invasion that was a constant concern of European nations. Moreover, with its vast size spanning the North American continent, the United States benefited from enormous natural resources, which were used by an industrious population that grew rapidly thanks to large-scale immigration. Geography, bountiful resources, and a large and diverse population define the natural elements of American strategic advantage, and they laid the basis for other traits—such as representative government, an innovative economy, and a robust higher education system—that developed over time into enduring U.S. strategic assets.

An equally important U.S. advantage has been the Nation's historical ability to transform its resources and ingenuity into usable military power. Indeed, the roots of America's DIB can be traced to the Nation's earliest years. The decision by President George Washington in 1794 to build a Navy was a pivotal early step. Warships, then as now, were costly and represented much of what resided on the outer edge of the technological frontier. There was considerable debate in Congress over the need for a Navy to protect American commerce from threats such as piracy and the confrontational tactics of major trading nations. And as always, concerns over projected costs and the national debt figured prominently in lawmakers' debates.

The Navy's first six frigates were among the best designed and constructed warships of their day, offering an impressive combination of speed, maneuverability, and firepower. They were well and professionally crewed, and in the War of 1812 performed stunningly well against a British fleet that was over 100 times larger. Despite this record, which has now become a part of our national heritage, there

was a spirited debate over the ships' design before and during their construction. They suffered from significant cost and schedule overruns, and they were the subject of considerable congressional scrutiny. Over their long history of active service, more than once they were allowed to fall into disrepair only to be reconstituted, and were the focus of several unsuccessful efforts to develop cheaper alternatives. In other words, the ships weathered many of the trials that still face major weapons systems today. The sometimes torturous challenges of procuring military equipment are deeply rooted in U.S. history.

Understanding the DIB

The modern defense industry is different from both its earlier incarnations and its commercial counterparts today. As the corporate behavior of the American DIB has developed in ways similar to that of other manufacturing entities, it has assumed a shape quite different from the one existing during the Eisenhower administration.

Today's DIB exists primarily as publicly owned private companies. As Ashton Carter, Under Secretary of Defense for Acquisition, Technology, and Logistics (AT&L), recently commented, "I have a title that suggests otherwise, but the truth is I don't build anything." This evolution away from a reliance on production facilities owned and operated by the government to the modern corporate-based industrial capability occurred mainly during the post-World War II and Cold War periods. It happened because the government wished to take advantage of the technological innovation and production efficiencies of the competitive private sector. Moreover, in the later decades of the 20th century, this shift found significant support in a political ideology favoring smaller government and a reliance on the private sector.

Although the DIB shares common traits with many other American manufacturing enterprises, there are clear differences. During a discussion in 1992 with a Russian academic charged by the Boris Yeltsin government with finding ways to convert the old Soviet military-industrial complex to commercial production, a former Pentagon official who had spent considerable time working with and in American industry offered a succinct summary of the distinction: "You have to understand," he urged, "that a defense industry is quite different from a commercial industry in very important ways. First, an

automobile manufacturer builds a car and hopes it can sell it; a naval ship builder sells a ship and hopes it can build it. Second, a commercial manufacturer generally aspires to sell a million things with a hundred parts; a defense manufacturer generally aspires to sell a hundred things with a million parts."

An understandable tension exists between today's major defense suppliers and their governmental military customers. While both are determined to ensure that the Armed Forces in the field have the most modern, high-quality, and reliable equipment possible, both also have their unique responsibilities: as suppliers to their shareholders, and as customers to the taxpayers. Corporations are in business to earn a profit. The financial condition of defense firms is of interest to defense customers, but it is not a primary interest. Thomas Rabaut, the former chief executive officer (CEO) of United Defense, once commented that he had to strike a balance among three competing communities: "A customer who thinks my prices are a bit too high. Highly skilled employees who feel their paychecks are a bit too small. And shareholders who feel their dividends are a bit too low."

This dilemma is, of course, faced by senior executives in businesses with a commercial focus, but the additional challenge for defense industries is with the customer. Whereas commercial firms have millions of customers, the DIB in many cases has only one: the U.S. Government. In essence, this is a monopsonistic market where one buyer chooses between many sellers. As in any monopsony, the sole buyer has tremendous leverage in setting terms to its numerous competing suppliers. The suppliers are largely left with the difficult choice of meeting demanding conditions or exiting the market, and over the past two decades many have chosen the latter.

Cuts and Consolidation

The period between 1992 and 1998 saw the cancellation or contraction of numerous large defense programs such as the B-2 bomber and the *Seawolf*-class submarine. After the Soviet Union collapsed, the defense procurement account was cut by over 40 percent as both national and defense priorities shifted significantly in the new post-Cold War security environment. This reprioritization meant that there would not be sufficient work to sustain the efforts of the nearly 30 large defense firms comprising the DIB, a

point driven home by Defense Secretary William Perry in a 1993 meeting with defense company executives, commonly known as “the last supper.” The result was an industry consolidation that lasted nearly a decade, with many firms selling out to others, merging, or simply exiting the defense business. Many facilities were closed and others sold, with the end result being that these 30 firms consolidated into 5—the companies now comprising the foundation of the American DIB: Boeing, General Dynamics, Lockheed Martin, Northrop Grumman, and Raytheon.

A major force in this effort was Norm Augustine, the legendary CEO of Martin Marietta who became the Chairman and CEO of Lockheed Martin when Martin Marietta and Lockheed merged. Although this evolution changed the defense industrial landscape and its competitive composition, Augustine believes the overall results have been positive: “I’d rather have a few strong companies than a whole bunch of weak companies,” he commented, adding that “as a buyer, I prefer five competitors, but I can live with two. And if I’m a seller, I don’t want to compete against a weak company that’s desperate for business. Weak companies do irrational things.”

The DIB of today is smaller not only in numerical size but also in economic scope relative to the U.S. economy overall. The defense industry President Eisenhower referenced in January 1961 was sprawling. During his tenure in office, defense spending ranged between 9 percent and 13 percent of gross domestic product (today it is about 4 percent). Nearly 60 percent of the Nation’s industrial research and development (R&D) was invested in the defense sector (today it is less than 10 percent). The defense industry was then the largest industrial sector of the U.S. economy, larger than automobiles, steel, or oil. Today, in contrast, the annual revenue of the major oil companies is nearly four times that of the major defense firms. Even in their current state, the top-tier automobile companies generate more than twice the revenue of their aerospace and defense counterparts. Only the American steel industry, a faint shadow of its previous size, is smaller than the aerospace and defense sector. To draw an even more dramatic comparison, the annual combined revenue of the five largest American defense firms is only slightly greater than half that of Wal-Mart, even when counting Boeing’s commercial aircraft

sales, which account for about half of its corporate revenue. While the defense sector is still large, profitable, and influential, it is far from the economic power it was in President Eisenhower’s time.

Evolving Requirements

The modern DIB is not only much smaller in size, but it also produces a much smaller and enormously more sophisticated product line. Over 12 million Americans served in uniform during World War II, approximately 9 times the number on Active duty today. The war rapidly mobilized a citizen military, which was mirrored by the rapid and massive mobilization of the existing industrial base. Many commercial firms were pressed into the war effort, including aircraft manufacturers such as Boeing and Convair, and automobile companies such as Chrysler and Ford Motor Company. Large serial runs of items that could be produced simultaneously on only slightly retooled commercial assembly lines, such as Chrysler’s production of the M4 Sherman tank powered by a Ford V8 engine, were the preferred production method. During the course of the war, Chrysler produced about 40,000 M4 tanks, of which about 30,000 went to Europe where they faced—and overwhelmed—2,000 larger and more sophisticated German tanks. In the case of aircraft, just to provide one illustrative example, the Ford assembly plant at Willow Run, Michigan, produced 8,635 B-24 Liberator bombers, turning out 1 aircraft every 55 minutes at its peak.

Such serial runs no longer exist. Today’s defense industry looks less like Ford and more like Ferrari. Major items of equipment are highly sophisticated, extraordinarily complex to manufacture, and have little in common with commercial products other than the incorporation wherever feasible of selected commercial components, mainly electronics. In the 3 years between 1942 and 1945, American industry produced over 200,000 military aircraft to support the Services in World War II. Between 2001 and 2004, the first 3 years of the current period of conflict, the modern

defense industry produced fewer than 250—a 99.9 percent reduction.

One major reason for this change is clear: with the abandonment of conscription and the transition to the all-volunteer force in the early 1970s, smaller numbers of volunteer Servicemembers had to be much better and more elaborately equipped than their predecessors. A Soldier on duty today in Afghanistan will likely go on patrol wearing nearly \$20,000 worth of equipment: a sophisticated automatic rifle, an advanced night vision device, lightweight but effective body armor, a ballistically protective Kevlar helmet, and a cutting edge communications suite allowing him to receive and transmit real-time information. By comparison, his World War II counterpart carried about \$200 in basic gear.

Today’s infantryman must cover a much larger space on the battlefield. He must be more selective about the targets he engages in order to avoid costly civilian casualties. He must have tremendous situational awareness, knowing exactly where he and his buddies are, coupled with an accurate idea of where the enemy is. And he must be able to share what he sees while accessing complex external combat assets such as aircraft, artillery, and drones—each capable of delivering precision-guided munitions. Some of this capability can be derived from commercial off-the-shelf items, but most cannot. What works well in a living room or at a campground may lack the ruggedness to operate reliably when lives hang in the balance in rough terrain and extreme weather.

During nearly a decade of war, American Armed Forces have put uncommonly heavy demands on their equipment. As one senior officer commented regarding the Army wheeled vehicle fleet, “Nearly every truck we have is grossed out and worn out,” meaning these vehicles are carrying considerably more weight because of the addition of various types of armor, and have been driven many miles beyond their expected usage rates. The peacetime Army of the 1990s, for instance, attempted to fund its tank fleet to drive 800 miles per year, believing that that

major items of equipment are highly sophisticated, extraordinarily complex to manufacture, and have little in common with commercial products



U.S. Navy (Sarah Burford)

operating level was sufficient to exercise the equipment and keep the crews trained to readiness standards. Some of the Army's major combat vehicles in Iraq have been driven as much as 100 miles per day, or about 36,000 miles per year. Imagine the implications of driving a fully loaded automobile such distances over difficult, largely unimproved roads. The debate is already raging over how much of the equipment deployed to Iraq and Afghanistan needs to be returned to American repair depots and, of the equipment returned, how much should be retrofitted to the most modern configurations and how much should just be replaced. However this is eventually resolved, it will be an enormous and costly effort.

Given these requirements for success in modern conflicts, it is not surprising that even as the numbers of men and women in the Armed Forces have fallen, the costs of equipping them on a per capita basis have increased significantly. Whereas once only a relatively small number of American military units were truly high-tech, now nearly all are. Moreover, as the information revolution

unleashed by the Internet and globalization have combined to make it easier for potential American adversaries to acquire deadly, high-tech capabilities at low cost, the U.S. military is constantly scrambling to keep up with the innovations of our adversaries, both actual and potential.

Persistent Challenges

The steady erosion of the American manufacturing base is painfully obvious in many parts of the country. In 1950, 1 in 3 jobs in the U.S. economy involved manufacturing. Now that number is 1 in 10, with the national security industrial sector accounting for only 15 percent of total manufacturing jobs. In other words, only about 1 out of every 70 workers in the United States is now involved in aerospace and defense. The jobs they perform are high-skilled and technically challenging, yet like those in the American manufacturing base itself, these defense jobs are starting to evaporate despite the consolidation of the industry. Since the first quarter of 2009, over 40,000 jobs in the defense industry have been lost. Although positions

requiring similar experience exist in other parts of the commercial sector, the specific skills of the defense industry can be quite different. For instance, a welder working on a building superstructure does not use the same techniques or adhere to the same standards as a welder assembling the hull of a submarine that will house a nuclear reactor, carry several 455-kiloton nuclear warheads, and operate in a wide range of inhospitable conditions.

There is also a decreasing pool of scientists and engineers possessing the primary skills that underpin the industry. Of science and engineering doctoral degrees awarded by U.S. universities in 2007, over 40 percent went to noncitizens who were either permanent residents or temporary visa holders. This proportion is expected to grow: the number of science and engineering doctorates awarded to noncitizens increased by 43 percent between 2003 and 2007. The legendary firms of Silicon Valley that have led the Nation into the information age can take full advantage of this pool of talented people. But since most sensitive defense jobs require security clearances, they cannot be filled by non-U.S. citizens.



World War II-era P-38F Lightning and modern F-35 Lightning II displayed at Lockheed Martin facility

U.S. Navy (D. Keith Simmons)

As American manufacturing and engineering jobs have moved overseas, and as the general interest in science, technology, engineering, and mathematics (STEM) education has decayed, a vicious cycle emerges that raises serious questions about whether the skills necessary to maintain a vibrant defense manufacturing base are likely to exist in the future workforce. The British discovered this problem a few years ago when they began designing the *Astute*-class submarine to replace the existing *Swiftsure*- and *Trafalgar*-class boats, the first of which are nearly 40 years old. Having neither designed nor built a submarine for nearly two decades, and struggling to master modern computer-assisted design techniques, the British discovered that many of the engineering and design skills essential to submarine production were simply not available in Britain. The premier U.S. submarine design yard, Electric Boat of Groton, Connecticut, was brought in to assist, and worked for over 3 years with British engineering teams in stabilizing and refining the design. Should the United States face such a circumstance because of lost capability, the only other country able to offer similar assistance would be China—an unlikely partnership. This is why the 2010 National Security Strategy called for a renewed commitment to science and technology to help advance U.S. national security priorities.

Enduring flaws in U.S. Government procurement processes also pose enormous challenges. The United States is trying to protect

itself today with a defense acquisition system offering industrial-age performance. The Government Accountability Office (GAO) found that the suite of 96 major defense acquisition programs was a combined \$296 billion over budget in 2008. In contrast, the suite of 75 programs was only \$43 billion over budget in 2000. Total overruns increased by 588 percent in 8 years. In 2008, the average delay in delivering initial capabilities for major weapons systems was 22 months, a holdup that adds to development timelines, which can take decades. Too often, these cost and time overruns are due to government's lack of clarity about what it wants coupled with an endless series of costly and time-consuming change orders. In short, too often government is not an ideal customer. These cost overruns and schedule slippages threaten to consume budgetary resources that are already expected to be in shorter supply as the United States redeploys its combat forces from Afghanistan and Iraq.

But at times, the DIB has struggled with its own demons. Ensuring quality control in complex products and services has always been a challenge, and it continues to vex military customers and suppliers today. For example, missile defense components provided recently to the U.S. Government have come under intense scrutiny by Pentagon officials. The Pentagon's Missile Defense Agency decided to penalize contractors for delivering parts that did not meet quality control standards. "I am withholding funding because

I don't see the level of scrutiny and the level of culture necessary for the precision work that's required," explained Lieutenant General Patrick J. O'Reilly. David Altwegg, the agency's executive director, added that government officials "continue to be disappointed in the quality that we are receiving from our prime contractors and their subcontractors." Given the prominent role played by the Obama administration's revamped "Phased Adaptive Approach" missile defense scheme in thwarting the budding Iranian missile threat, these ongoing quality control problems constitute a clear and present danger to U.S. national security.

Performance and behavioral shortcomings can have lingering effects. In the recent past, a 22-year-old arms dealer secured a contract with the Army and then provided unreliable and obsolete ammunition to Afghan forces. Earlier, and more seriously, a corrupt government acquisition official steered numerous high-value contracts to a major supplier and then sought jobs there for herself and her family. Procurement scandals such as these are infrequent, but they cast a pall over the entire DIB. Such corruption looks especially bad to the public when combined with reports of defense industry lobbying expenditures. While the DIB today may not be the one President Eisenhower warned about in terms of size or activity, it does sometimes exhibit the problems of quality control and corporate behavior he cautioned against.

the U.S. military's slow initial response to the tactical challenge posed by improvised explosive devices almost doomed America's entire strategic war effort in Iraq

Future Security Requirements

Technological advancement and globalization are making it easier for state and non-state actors to acquire deadly capabilities that threaten Americans at home and abroad. For example, cyberattackers today can launch synchronized, dispersed, and untraceable assaults against U.S. military and civilian networks with little more than a laptop and an Internet connection. The U.S. Government faces an inherent disadvantage in defending against such attacks because cumbersome bureaucracies struggle to observe, orient, decide, and act as quickly as smaller, more decentralized adversaries. America's vulnerability to nimble, adaptable enemies exists not only at the high-tech end of the conflict spectrum, but also in so-called low-end operations such as irregular warfare and counterterrorism.

For instance, the U.S. military's slow initial response to the tactical challenge posed by improvised explosive devices almost doomed America's entire strategic war effort in Iraq. The conflicts in Afghanistan and Iraq have often demonstrated that the Pentagon's acquisition processes complicate efforts to provide rapidly needed battlefield capabilities if doing so runs counter to bureaucratic business as usual. The Pentagon was eventually successful in quickly fielding a large number of Mine Resistant Ambush Protected (MRAP) trucks for our forces in Iraq, but that effort was greatly facilitated by the unambiguous support of the Secretary of Defense, a large and rapidly approved congressional appropriation, and existing vehicle designs deemed suitable for the requirement. The MRAP example shows what industry can do when conditions are right and some of the normal acquisition steps, such as extensive and elaborate testing, are either waived or abbreviated.

Preparing for the immediate future, however, requires rapid adaptation. Policy-makers must develop processes that rapidly identify emerging threats, consistently generate high-quality solutions, and expeditiously reorient toward agreed-upon priorities. In this regard, the 2010 Quadrennial Defense

Review (QDR) was encouraging. First, it devoted two pages to discussing the need for a healthy industrial base—in itself a positive development because previous QDRs did not even mention the subject. Second, it concluded that the Pentagon must “build the agile, adaptive, and innovative structures capable of quickly identifying emerging gaps and adjusting program and budgetary priorities to rapidly field capabilities that will mitigate those gaps.” In pursuing these objectives, the cooperation of the Defense Department with a healthy, competitive, and dynamic DIB is absolutely essential.

There is much work to be done. The U.S. Navy is smaller today than at any time since 1916, when the United States was just discovering its global role and embracing its emerging strategic importance. Though the U.S. fleet remains dominant, the Nation retains vital interests around the globe, and no matter how able our frontline combatants are, they can only be in one place at a time. In addition, the challenges of nuclear proliferation only increase the demand for sea-based missile defense for U.S. forces and those of our allies. Despite these concerns, the Navy's 30-year shipbuilding plan released this past spring includes fewer ships than the one before. After its release, Northrop Grumman, the largest supplier of naval ships to the Pentagon, announced the closure of one of its major shipyards, the Avondale facility in New Orleans. Without serious rethinking of the current shipbuilding plan, along with more program stability so shipbuilding programs do not continue to suffer from cost and schedule overruns, further “rationalization” of the shipbuilding industrial base may be necessary at the very time more and newer ships are required to meet the threats of emerging nuclear states, regional instability, humanitarian relief, or—as we have seen recently—piracy.

Restoring America's Endangered Arsenal of Democracy

The U.S. military, Pentagon civil servants, and the DIB are all part of a unique partnership that brings the power and resources of the United States to bear when it is called for. If mishandled, defense acquisition processes can waste taxpayer dollars, delay the procurement of equipment that U.S. troops need, and undermine public trust in the Government. These broader

consequences diminish American military effectiveness and thereby invite disregard for and aggression toward the United States and its core interests. Strengthening the relationship between the U.S. Government and the DIB, as well as enabling the continued vitality of the DIB itself, is no longer just about saving taxpayer dollars or increasing industry revenues. It has become a national security imperative.

The U.S. Government has taken steps in recent years to improve acquisition practices within the Pentagon. Noteworthy reforms include passage of the Weapons Systems Acquisition Reform Act of 2009 and Defense Secretary Robert M. Gates's ongoing campaign to reduce spending on underperforming and lower priority weapons systems, along with his focus on certain administrative costs. These valuable improvements, however, are only a start. The Defense Department needs to take additional steps including adding greater discipline to its requirements process, more fully evaluating systems from a full life-cycle ownership perspective rather than a 1-year budget viewpoint, and rebuilding a solid partnership relationship with industry. On this last point, Secretary Gates and Under Secretary Carter have initiated a significant outreach to senior industry leaders, but another senior officer recently confessed he was nervous about meeting with industry representatives because he was concerned about “violating some law somehow.” This reticence must be overcome if the mutual objective of providing the best possible technologies to our deployed forces is to be met.

President Eisenhower was right to warn against unwarranted influence by the DIB. However, the DIB also continues to represent a vital strategic asset that provides the United States with an enormous advantage over those who would seek to do us harm. Sustaining the health of America's arsenal of democracy today—while continuing to monitor relentlessly for waste and underperformance—will maximize U.S. national security in dealing with a complex world during tough economic times. The modern American industrial base retains its capacity for innovation, creativity, efficiency, and responsiveness in getting needed capabilities into the hands of our Servicemembers. Preserving these qualities, and the strategic advantage they provide, is a matter of enduring national importance. **JFQ**

Logistics Planning and Collaboration in Complex Relief Operations

By STEVEN J. ROMANO

In the past several years, the Department of Defense (DOD) has increasingly participated in complex relief operations with other U.S. Government agencies and nongovernmental organizations in response to humanitarian crises. These operations pose significant challenges for military logisticians. Most humanitarian assistance/disaster relief (HA/DR) operations are characterized by rapidly changing circumstances and a lack of clear and accurate information; they are also distinguished by substantial pressure to quickly provide relief supplies and materiel to an affected area.

While DOD has the airlift capacity, disaster funding, critical supplies, and logistics systems to be an effective interagency partner in responding to these crises, additional efforts are needed to provide military logisticians with the appropriate capabilities, tools, and training to meet the varied challenges associated with complex HA/DR operations.

This article focuses on the U.S. European Command's (USEUCOM's) efforts to support disaster relief operations with logistics in the country of Georgia during August and September 2008. While admittedly a relatively small operation compared

to DOD's support to the Indonesian tsunami in 2004, the Pakistan earthquake in 2005, or the 2010 earthquake in Haiti, the Georgia humanitarian assistance crisis (named Operation *Assured Delivery*, or OAD) nonetheless provides a microcosm of HA/DR logistics operations and challenges. Furthermore, it offers a useful framework for conducting analysis and developing recommendations for improving DOD's future response capabilities. The article shares my observations, insights, and lessons learned while supporting Georgia relief operations as Director of Logistics for USEUCOM

U.S. and Georgian forces unload humanitarian aid at Tbilisi International Airport for victims of Georgia-Russia conflict



U.S. Air Force (Scott Wagers)

a more effective and coordinated approach to crisis logistics planning and HA/DR operations is required

during OAD operations. While the team of USEUCOM and its component forces—U.S. Army Europe, U.S. Air Forces in Europe, U.S. Naval Forces Europe and U.S. Marine Corps Forces Europe, the Defense Security Cooperation Agency (DSCA), the Defense Logistics Agency (DLA), the U.S. Agency for International Development (USAID), several nongovernmental organizations (NGOs), and U.S. Transportation Command (USTRANSCOM)—were collectively able to deliver significant relief supplies within 96 hours of the crisis, a more effective and coordinated approach to crisis logistics planning and HA/DR operations is still required.

As DOD continues to embrace complex and often large-scale HA/DR operations as a core mission during a period of declining resources, we cannot afford to conduct these types of missions in a repetitively ad hoc fashion. A more structured approach is needed that combines coordinated systems, procedures, and, perhaps most important, a common operating picture with a supporting framework for the whole-of-government crisis dialogue, planning, and information exchange.

Crisis Timeline

On August 8, 2008, Russia deployed combat troops in South Ossetia and launched bombing raids deep into Georgia in response to a large-scale Georgian military attack against South Ossetia the previous day. The conflict continued for the next several days and, by mid-August, *BBC News* was reporting that Moscow claimed a death toll of 2,000. According to USAID reports, an estimated 30,000 people were displaced within South Ossetia, and more than 135,000 were displaced in other parts of Georgia. An additional 35,000 South Ossetians were reported to have fled across the Russian border into North Ossetia. The United Nations

High Commissioner for Refugees (UNHCR) reported that some 127,000 people were forced from their homes throughout Georgia by the conflict, adding to an already displaced population of some 223,000 uprooted by conflicts in the early 1990s in South Ossetia and Abkhazia.

In response to the crisis, USEUCOM supported USAID's Office of U.S. Foreign Disaster Assistance (OFDA) to assist these displaced people. Housed within USAID, the OFDA is designated as the lead U.S. Government (USG) office for providing coordinated humanitarian assistance in response to international emergencies and disasters. In cooperation with other USG offices and international humanitarian experts, OFDA continuously monitors global hazards, identifies potential areas of need, and stands ready to respond whenever and wherever disaster strikes.¹

To respond to the crisis, USAID committed an initial \$250,000 in emergency assistance funds on August 9. This funding was used to provide emergency relief supplies, with a capacity to assist up to 10,000 people. The U.S. Embassy, located in the Georgian capital city of Tbilisi, released pre-positioned disaster packages that included tents, blankets, bedding, hygiene items, clothing, beds, cots, and medical supplies. On August 10, the U.S. Embassy issued a Disaster Declaration in response to the crisis, and the government of Georgia (GoG) officially requested humanitarian assistance—specifically, medicines, medical supplies, emergency shelter items, and food. The Georgian Minister of Refugee and Accommodations indicated approximately 3,000 internally displaced persons were expected in Tbilisi and the immediate area, and also cited a need for emergency shelter items (tents, blankets, cots, bedding, hygiene items, and clothing).

On August 13, 2008, the first shipments of U.S. humanitarian aid arrived in Georgia, with officials stressing the American government's commitment to its ally.² As the number of displaced personnel in Tbilisi increased, the UNHCR and the GoG began coordinating plans for international assistance. With each passing day, more people arrived in Tbilisi after fleeing their homes. Later that month, the GoG's coordinator for humanitarian affairs, Koba Subeliani, told *BBC News* that more than 230,000 people were believed to have been displaced.³ On August 14, there were growing concerns in Tbilisi about the extent of the crisis, as well as concerns

about the humanitarian situation deteriorating further as Russian troops remained in Georgia, impacting relief efforts.

Following media reports that Russian armed forces had damaged infrastructure at the port of Poti, staff from the World Food Program (WFP) conducted a site visit on August 15 and reported that commercial activity had resumed at the port despite some damage to military facilities there. WFP also noted that trucks weighing up to 5 to 7 tons could safely use the southern route between Tbilisi and the ports at Poti and Batumi.⁴

Also on August 15 (7 days after the start of the crisis), the USAID/OFDA Disaster Assistance Response Team (DART) arrived in Tbilisi to conduct humanitarian needs assessments in coordination with the GoG and other relief agencies. Their efforts would help define USAID assistance priorities. While the arrival of the DART was certainly helpful, it would have been more beneficial had it deployed earlier in the crisis to augment DOD planning efforts and assist in the development of a disaster relief concept of logistics. USAID/OFDA continued to work closely with the U.S. Department of State (DOS), DOD,



Humanitarian supplies cover flight deck of USCGC Dallas bound for Georgia

USCG (Lauren Jorgensen)

Rear Admiral Steven J. Romano, USN (Ret.), served as Director of Logistics at U.S. European Command supporting the 2008 Georgia relief crisis. He now works for LMI in McLean, Virginia.

and humanitarian agencies on the ground to coordinate relief activities. The DART noted that the reported destruction of the railway bridge between Gori and Tbilisi could impact the distribution of emergency relief food supplies to internally displaced persons (IDPs). Indeed, as of August 16, the damaged bridge was affecting the transport of 7,000 metric tons of wheat and other emergency food commodities.⁵

By September 4, the U.S. military, despite the challenges outlined above and in the following section, had delivered over 2 million pounds of emergency shelters, food, water, bedding, and medical supplies to displaced people as part of Operation Assured Delivery.⁶

Problems

Difficulty Identifying Initial Relief Requirements. With every crisis, there is always a sense of urgency to deliver relief supplies to the affected area as soon as possible. In the case of Operation Assured Delivery, USEUCOM logistics planners were under extraordinary time pressure to locate and deliver suitable supplies.

Conversely, in almost any crisis scenario, military planners are initially very limited in their ability not only to anticipate specific HA requirements, but also to develop solutions to problems on the ground. Typically, under normal operating conditions, military logisticians receive precisely defined materiel requirements with an appropriate lead-time to fill those requirements.

For OAD, USEUCOM logistics leadership was able to identify initial relief requirements by simply contacting the USAID Director at the Embassy in Tbilisi. This action was critical, as one of the key challenges in effectively supporting relief operations is obtaining an “authoritative requirement” vice what is “thought” to be needed. This initial coordination with the Embassy to determine actual requirements as expressed by the government of Georgia proved to be vital for quickly identifying, sourcing, and delivering appropriate supplies. A list of anticipated needs was generated by USAID’s director and provided to the USEUCOM logistics team to source from available supplies in the region. Despite the apparent simplicity of this approach—just pick up the phone and call—there was no formal structure in place during the crisis for DOD to engage with USAID. The USEUCOM team relied on the on-the-fly initiative of its people for interagency engagement to determine requirements and develop solutions.

Properly Sourcing Relief Supplies. The next challenge faced by USEUCOM logistics planners was to identify available resources to support relief efforts and to gain visibility over parallel NGO efforts as well. USEUCOM

one of the key challenges in effectively supporting relief operations is obtaining an “authoritative requirement” vice what is “thought” to be needed

logistics planners were seeking answers to the following questions:

- What were the needs expressed by the government of Georgia?
- Who at the U.S. Embassy had visibility of these needs?
- If relief supplies were needed, who had the appropriate relief supplies and where were they located?
- How much HA/DR inventory did NGOs possess and where were those inventories located?
- What was the status of ongoing NGO relief supply shipments and when and how were they expected to arrive in Tbilisi?
- What specific DOD support was needed? What support would be redundant, duplicating a capability already being provided by another agency or NGO?

While today’s military logisticians have access to a variety of asset visibility tools, these tools do not include assets held by other USG agencies, nor by NGOs. Therefore, planners are not aware of the type, quantity, condition, and location of all relief supplies that could be made available to support operations. Fortunately, in the case of OAD, the USEUCOM humanitarian assistance staff had established an ongoing relationship with the DOS Office of the Coordinator of U.S. Assistance to Europe and Eurasia. This helped in the identification of initial sources of relief supplies located in Germany.

Disconnects Between DOD Approval Process and Reality. While USEUCOM efforts to find sources of supply were underway, a DOS request for DOD support to transport initial relief supplies to Tbilisi was being staffed in the Pentagon. When this came to the attention of USEUCOM planners, they immediately followed up to ensure the request was being processed expeditiously. DOD approval of such a request would allow USEUCOM to receive funding and proceed with relief operations. According to DSCA authorities, when a disaster occurs, DSCA, USAID/OFDA, Office of the Secretary of Defense for Policy, and the Joint Staff should begin an immediate dialogue, discerning the status of the event, what the affected country requires, and what the USG can provide. If DOD action is required, DSCA begins working with the appropriate Combatant Command (COCOM) in the impacted region to determine requirements and develop cost



General Bantz J. Craddock, USA, then-commander, U.S. European Command, meets Georgian soldiers assisting with delivery of humanitarian supplies

DOD (John Gay)

estimates. Additionally, they help secure Secretary of Defense approval.

Given the significant challenges and costs associated with moving large amounts of relief supplies by air, transportation planners are typically required to develop accurate transportation cost estimates *in advance of DOD approval* of these operations. However, in order to follow the sequential nature of the approval process just outlined, interagency dialogue is involved in identifying pertinent agency points of contact, determining and locating required assets and plans, and developing cost estimates for transportation from source to the point of crisis. This simply begins too late in the game to be effective after a crisis has occurred. The nature of many HA/DR scenarios is such that conditions on the ground can quickly deteriorate in the absence of needed supplies and materiel. To rapidly airlift large quantities of relief supplies from source to point of need, DOD logisticians require a capacity to conduct pre-crisis planning and coordination, along with negotiation with their interagency counterparts. However, these functional capacities may not be available at the beginning of a crisis and must be established before materiel can start flowing to the affected area. This is time-consuming and a cause of delays in the arrival of relief supplies (which often takes days). Pre-crisis logistics planning should be the norm, allowing the establishment of as many of these functional capacities as possible up front.

Lack of Logistics Planning and Coordination Enablers. Typically at the onset of a crisis, logistics coordinating cells are rapidly organized but lack the capacity to effectively conduct coordinated HA/DR logistics operations. During the Georgia crisis, the USEUCOM Deployment Distribution Operations Center (EDDOC) team assumed a coordination role with the U.S. Army's 21st Theater Sustainment Command and DOS to accelerate the ground movement of initial DOS supplies, which were stored at U.S. Army Medical Materiel Center, Europe, based in Pirmasens, Germany. These supplies were then moved to the airfield at Ramstein Air Base. On August 13, the first of two USG-carrying C-17 flights



Soldiers at Ramstein Air Base load pallets with sleeping bags and cots for delivery to Georgia

arrived in Tbilisi to provide emergency relief and medical supplies. The second flight arrived on August 14, carrying additional commodities, including antibiotics requested by the GoG Ministry of Health.⁷

USEUCOM was able to leverage an already in-place asset, the EDDOC, to enable the logistics planning and coordination necessary, thus quickly putting supplies on the ground. This begs the questions of whether all COCOMs have similar Deployment and Distribution Operations Center (DDOC) structures to enable the coordination of HA/DR operations and whether they are properly organized to support such operations. Does the DDOC structure (if one exists) support interagency coordination on a recurring basis? In the absence of such logistics planning/coordination enablers, should DOD consider establishing a deployable Humanitarian Assistance Coordination Center capability—one that is manned, trained, and equipped to provide logistics coordination capabilities across the interagency to support HA/DR missions? Should COCOMs try to leverage the recently developed Operational Contract Support planner concept and request that DOD establish and fill COCOM staff billets

for foreign humanitarian assistance logistics planners in order to build an organic and enduring HA planning capacity?

Difficulty Coordinating and Deconflicting Airlift. In addition to the air delivery of initial DOD/DOS supplies, the International Committee of the Red Cross (ICRC) established an air bridge from its logistics center in Amman, Jordan, to Tbilisi, Georgia. On August 13, the first of five scheduled ICRC flights arrived in Tbilisi, delivering food and nonfood commodities. ICRC was preparing to ship an additional 35 tons of emergency relief supplies (including blankets, plastic sheeting, water cans, and hygiene supplies) in the coming days.⁸ At this time, the USEUCOM team not only lacked visibility of ICRC efforts, but also the authority to interact with the ICRC logistics center in Amman to coordinate operations. These two initial transportation deliveries, one from DOD and one from ICRC, arriving in Tbilisi on the same day, were not synchronized and could have caused delays in the offload and distribution of relief supplies due to capacity limitations at the airfield. Fortunately, there was sufficient space and cargo-handling equipment to accommodate both the ICRC and DOD/DOS initial shipments.

Once on the ground in Tbilisi, the supplies were to be distributed by five different NGOs: Counterpart International, A Call to Serve–Georgia, International Relief and Development, Hellenicare, and the United

at the onset of a crisis, logistics coordinating cells are rapidly organized but lack the capacity to conduct coordinated HA/DR logistics operations

Methodist Committee on Relief. Unfortunately, USEUCOM planners had no previous experience interacting with these NGOs and had very little understanding of their materiel distribution plans. As a result, USEUCOM logistics planners could not measure how quickly relief supplies could be moved off the airfield in order to plan and schedule future airlift missions and prevent potential bottlenecks that would delay the distribution of relief supplies.

Limitations in Airfield Offload and Throughput Capacity. Offload capacity at an airfield receiving relief supplies is often a principal cause of delayed airlift flights. New flights either cannot get the necessary airfield space or must sit idle while the necessary materiel handling equipment (MHE) is being used elsewhere. Initially, USEUCOM relied on an NGO capability to offload the first loads of relief supplies at Tbilisi. As the operation size increased, they determined that additional offload capacity was needed and requested U.S. Air Force Crisis Response Group support. This action improved the offload and throughput capacity at the airfield.

Military logisticians need to better understand the organic and NGO-provided offload capabilities available at airfields in advance of a crisis. In addition, DOD

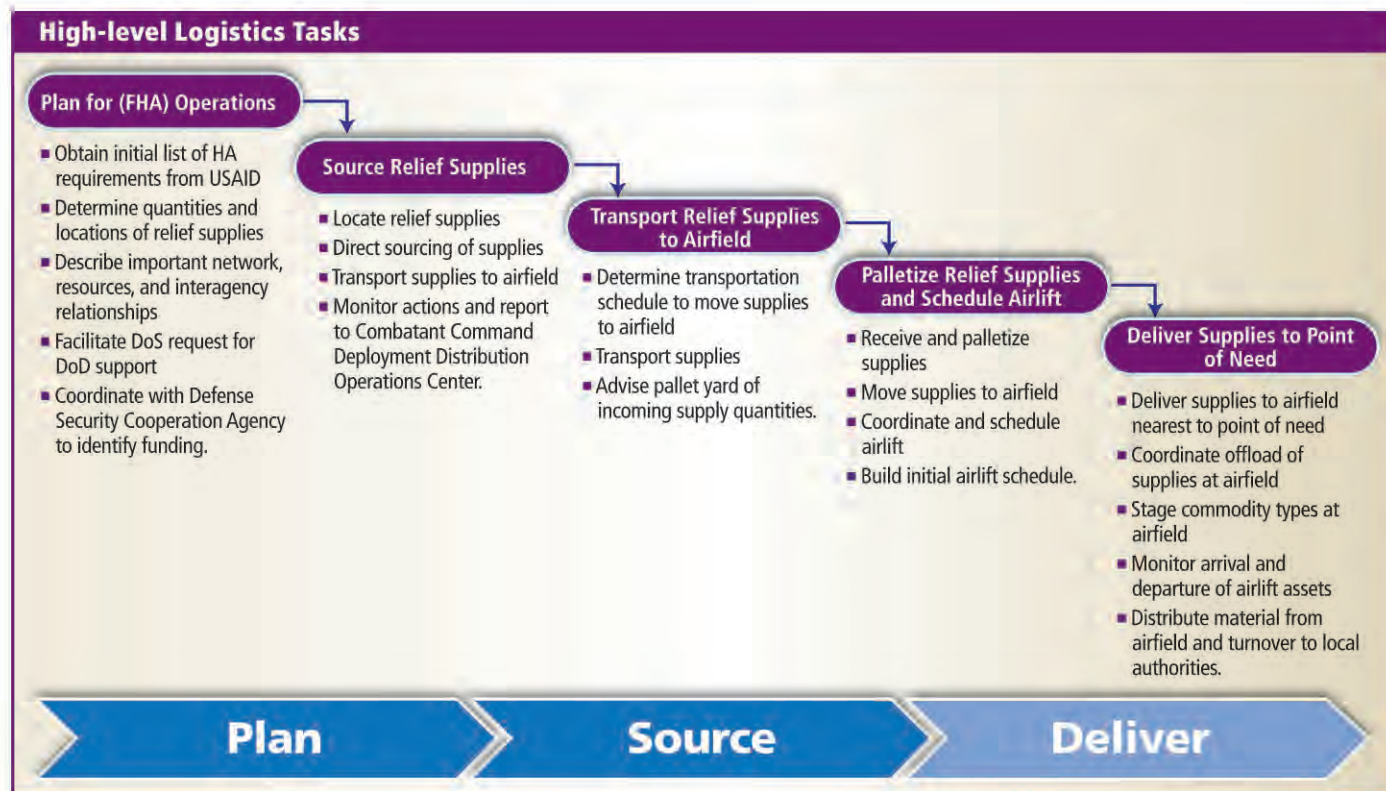
planners must be able to provide USAID and pertinent NGOs with accurate forecasts of incoming DOD airlift so offload capacity is optimized but not overtaxed. USEUCOM planners were not able to provide these forecasts and, as a result, relief supplies began to build up at the airfield. A better, more complete common operating picture (COP) of airfield relief operations was needed so USEUCOM logisticians could precisely sequence the delivery of the right amount of DOD supplies. Among the answers they needed were which aircraft had already been offloaded and which were awaiting offload, what items and quantities were arriving on incoming aircraft and the source of those aircraft (DOD assets or NGO-contracted), and where existing airfield MHE assets were and what their status was. All this information was critical to efforts to optimally coordinate the flow of relief materiel on the ground.

Properly Sustaining the Flow of Logistics. During the sustainment phase of HA/DR operations, additional logistical challenges can occur. For example, DOD often begins to lose visibility of the types and quantities of relief supplies moving through the supply chain. As previously mentioned, this usually results in relief supplies accumulating at the airfield because there is no COP that includes

incoming material, available airfield MHE capability, and the capacity of NGOs to move supplies from an airfield to the affected area. A tool for measuring the cargo capacity of the entire supply chain from source to point of need would greatly help COCOM logistics planners. Such a tool would help “meter the flow” of HA/DR resources and allow for more consistent sustainment efforts.

Many researchers have used the Supply Chain Operations Reference (SCOR) model to assist in the analysis of supply chain processes and outcomes. Figure 1 represents a high-level summary, following the SCOR framework of “Plan, Source, Make, Deliver,” and Return of HA processes used by USEUCOM logistics planners during the crisis; this may serve as a useful reference tool for future operations. To more effectively coordinate sourcing and sustain delivery of relief supplies, existing automatic identification technology (AIT) media should be used to capture shipment data. This data can then be communicated to a COP where it would become visible to all authorized users.

As Operation Assured Delivery progressed, there was an increasing desire by USEUCOM to develop a sustained flow of logistics to satisfy emerging requirements established by the GoG and USAID. The



reliance on DOD-only assets could have resulted in the shipment of some inappropriate supplies as well as excess quantities

goal was to leverage all the capabilities of its components to either source or deliver materiel. Following requests from the GoG for tents, blankets, and additional commodities, USEUCOM planned to dispatch two C-130 flights per day from August 15 through 21, with each flight carrying emergency relief supplies. Again, without prior knowledge of interagency capabilities, USEUCOM planners tried to find sources for tents, blankets, and additional supplies within DOD inventories. This reliance on DOD-only assets could have resulted in the shipment of some inappropriate supplies as well as excess quantities. Fortunately, USAID had deployed a liaison officer to USEUCOM by mid-August. This individual was able to advise USEUCOM planners of the availability of blankets and hygiene kits at the USAID warehouse in Pisa, Italy. Once these assets were known, USEUCOM planners requested theater-assigned U.S. Navy aircraft to pick up and deliver thousands of blankets and hygiene kits. A U.S. Navy C-9 jet carrying humanitarian assistance arrived in Tbilisi on August 18, marking the Navy's first humanitarian assistance mission to the region.

As the need for food continued to grow during the crisis, USEUCOM's next major planning challenge was to develop a sourcing and distribution plan for hundreds of thousands of humanitarian daily rations (HDRs). These rations needed to be moved from Albany, Georgia (in the United States), to Tbilisi. These HDRs were required for the purpose of providing additional emergency food until larger NGO efforts could be established. EDDOC engagement with USTRANSCOM resulted in the scheduling of dozens of C-17 flights, together with the two daily C-130 flights, to deliver HDRs to Tbilisi, thereby creating a sustained flow of logistics. The importance of USEUCOM's EDDOC as an ad hoc HA/DR logistics enabler—and the need to replicate this capability in all regions—should be obvious by now.

Need for Unclassified Information-sharing and Collaboration Tools. Infor-



U.S. Air Force (Ricky A. Bloom)

USEUCOM Joint Humanitarian Assistance Assessment Team members arrive in Tbilisi to work with U.S. and international governments and nongovernmental aid organizations

mation-sharing and the use of shared tools are essential to logistics planners' ability to organize, source, and deliver relief supplies. At the beginning of the Georgia crisis, USEUCOM EDDOC planners hosted daily collaboration sessions to synchronize and share information with the USTRANSCOM, the Surface Deployment and Distribution Command, various USEUCOM components, and DLA. As a result, USEUCOM was able to quickly locate thousands of in-theater cots from Marine Corps stocks and ship them to the point of need. However, since the participants were all DOD entities, the bulk of this collaboration took place in a classified forum, thereby excluding several key interagency representatives who could have helped in the development of logistics solutions.

Need for More Humanitarian

Assistance Exercises. Given the inherent complexity of HA/DR operations, and the intense effectiveness requirement for detailed coordination across the interagency and NGOs, DOD logistics planners should have opportunities to establish and develop these skills in an exercise environment. While USEUCOM had not sponsored any HA/DR exercises in advance of the Georgia crisis, the U.S. Southern Command (USSOUTHCOM) had. In order to improve the collective ability of the United States and its partner nations to respond effectively and expeditiously to disasters, USSOUTHCOM, beginning as early as 2002, sponsored disaster preparedness exercises, seminars, and conferences on the issue. The command is currently averaging three

HA/DR exercises or HA/DR planning-related events per year. USSOUTHCOM has also supported the construction or improvement of several Emergency Operations Centers (EOCs) and Disaster Relief Warehouses (DRWs) and has provided and stocked prepositioned relief supplies across the region. Construction and refurbishment of additional EOCs and DRWs are ongoing. This type of multinational disaster preparedness has increased the ability of USSOUTHCOM to work with partner nations in HA/DR operations.⁹ Furthermore, this was played out in Operation *Unified Response* in Haiti, where coalition, interagency, and NGO coordination and collaboration were at an all-time high in terms of quantity—truly a “unified” response.

These types of events would be beneficial for all COCOM logistics planners. Practicing HA/DR planning, coordination, and collaboration *pre-crisis*, in a series of exercises designed to include coalition forces, the interagency, and NGOs, would be invaluable and would significantly improve COCOM's ability to plan and execute future HA/DR operations.

Solutions

The above problems are reflective of those I experienced at USEUCOM during the Georgia crisis. We have lived through other HA/DR crises since then and there are others that could be enumerated. Likewise, some problem areas I have cited have seen improvement. For example, there is very encouraging progress in the area of developing web-based, unclassified collaboration tools that are

inclusive enough to bring the interagency and NGOs under the logistics planning and coordination umbrella.

Another positive development was a November 22, 2010, *American Free Press* article in which Secretary of Defense Robert Gates expresses support for a proposal to establish crisis cells specifically to aid Latin America in disasters. The proposal was discussed at the ninth Conference of Defense Ministers of the Americas in Santa Cruz, Bolivia. Secretary Gates told representatives from some 30 countries that the proposal followed “honest assessments of what worked and what didn’t in Haiti” in the aftermath of that country’s catastrophic earthquake that killed 250,000 people. The proposal involves creating a series of Military Assistance Collaboration Cells, or MACCs, which would share information and technology with all HA/DR partners. More of this is what is needed and will surely benefit future HA/DR planning, coordination, and response efforts.

When asked about the lasting impact of the Georgia relief operations during a USEUCOM logistics lessons learned session, I responded that the keys to our success in the future are to:

- develop pre-crisis integrated logistics planning with the interagency
- gain visibility of all relief supplies within the affected theater
- define desired HA/DR processes and outcomes
- develop an interagency framework for collaboration in advance of HA/DR situations
- practice and refine HA/DR response frequently through exercises and other pre-crisis events and forums.

There are many HA/DR logistics actions that DOD needs to perform better in the future. Doing all, or even some, of these things will lead to improved HA/DR responses. Solutions extensive enough to include not only DOD and the interagency but also key NGOs—many of which have extensive yet

“untapped” experience in HA/DR missions—are preferred. The Department of Defense, together with other USG agencies, should consider a number of possible actions.

Logisticians must gain full visibility of interagency relief supplies and a complete understanding of the processes to source and transport supplies during a crisis. By their nature, HA/DR operations offer very compressed timelines for identifying appropriate supplies and seeking solutions to move them. Military logisticians need to gain visibility of all NGO HA/DR activities and inventories in order to assist with managing and deconflicting the flow of logistics into the affected area. This should include a framework for controlling and sequencing relief flights to ensure the affected country’s priorities are being met and logistics bottlenecks do not impede the flow of relief supplies. It should also include processes to identify HA/DR materiel that transits via the Defense Transportation System, regardless of source. DOD has extensively used AIT media to capture shipment and content data for in-transit visibility. However, during OAD, several HA/DR shipments arrived in Tbilisi without proper radio frequency identification (RFID) tags, which hampered the expeditious distribution of supplies to IDPs. COCOM staffs should update and implement RFID policies, test them during humanitarian relief exercises, and ensure they are rigidly applied during actual HA/DR operations.

All COCOMs need an integrated logistics planning construct with the interagency in advance of HA/DR crises. To promote integrated logistics planning, we should identify gaps in processes and knowledge within DOD and interagency partners and build a strategy to address these shortcomings. The initial delivery of relief supplies to Tbilisi took approximately 96 hours and could have been delivered more effectively if DOD and the interagency had developed an integrated logistics planning capability and documented and tested a concept of logistics support plan in advance of the crisis. Connecting with relevant NGOs and having an understanding of key local participants and authorities is critical to complex HA/DR operations. Success depends on early engagement and planning and is enabled by open communications networks with maximum sharing of information in unclassified forums to the extent possible. We should develop an interagency framework supporting continuous dialogue between logistics departments in advance



Sailors aboard USS *McFaul* guide crane cable to transfer pallets of humanitarian aid to barge

U.S. Navy (Eddie Harrison)

solutions extensive enough to include not only DOD and the interagency but also key NGOs are preferred

of a crisis as well as ongoing education and training to provide the ability for planners to better understand processes associated with HA/DR operations and interagency and NGO collaboration. Joint and interagency doctrine should be updated for these types of complex operations to better identify processes, roles, responsibilities, and structured organizational interactions.

DOD needs a standing coordination cell, established to provide continuous planning and coordination with the interagency and NGOs. DOD should consider development of a deployable Foreign Humanitarian Assistance Coordination Center and/or MACC capability to synchronize and coordinate logistics requirements and capabilities in advance of a crisis. The MACC could serve as the principal Department of Defense HA/DR planning cell for logistics, provide an entry point for USAID-generated requests for DOD support, facilitate the sourcing of DOD and other USG-owned relief supplies, interface with NGOs to determine their assets and distribution processes, and begin to develop a badly needed common operating picture.

DOD should continue to develop and deploy collaborative tools to facilitate HA/DR information sharing and coordination. These tools must reside in or migrate to an unclassified forum as much as possible to allow participation by other government agencies and key NGOs. We need to expand their use during HA/DR exercises and operations and ensure our interagency and NGO partners have access to and training in such systems. In order to develop a complete set of response options, DOD logistics planners likewise should have access to and be trained in the use of systems and processes used by other U.S. Government agencies and NGOs to manage relief supply inventories and to better understand their logistics capabilities, activities, and priorities during a crisis. DOD logistics planners should have a broad familiarity with NGO and other relevant organizations (i.e., commercial and academic partners) operating in their area.

All Combatant Commands should have a robust series of logistics exercises to refine

their HA/DR planning skills. At a minimum, tabletop exercises specifically focused on the logistics aspects of HA/DR operations should be scheduled on a frequent basis and attended by representatives of both DOD and the interagency. Logistics planners should also consider developing regularly scheduled seminars, workshops, roundtables, and panel discussions designed to engage all HA/DR partner organizations. In addition, mechanisms to capture the lessons learned in these evolutions should be created that will influence the development of interagency doctrine. USEUCOM recently planned and conducted Flexible Response '10, a command post exercise focusing on Foreign Consequence Management and Humanitarian Assistance Disaster Relief planning and operations. This exercise was designed to strengthen a whole-of-government approach through engagement with various U.S. agencies as well as partner nations and nongovernmental organizations. The exercise helped USEUCOM identify gaps in its logistics capabilities and allowed it to become more familiar with the crisis response capabilities of component organizations.

Military leaders at the COCOM level need a strengthened understanding of the interagency and their HA/DR crisis response roles and responsibilities. What does each element of the interagency bring to this type of crisis? What is the best approach for harnessing and mobilizing their capabilities? Who is in charge and why (i.e., who is the lead Federal agency and what are its specific roles and responsibilities)? Many U.S. Government agencies have the capacity for HA/DR support. Efforts should be taken to develop a catalog or matrix of their respective capabilities that would help logistics planners develop more comprehensive and inclusive HA/DR solutions.

DOD needs a capability to assess the overall effectiveness of relief supplies provided. Did they get to the affected population or were they stored in country for a future crisis? Were the quantity, type, and quality of materiel appropriate to the need? Were there gaps? Was there expensive and wasteful duplication of some capabilities? Did relief supplies result in the achievement of one or more of USAID's stated effects during the crisis? USAID should refine and share its existing measurement tools and processes to assist DOD in assessing the overall effectiveness of HA/DR efforts.

Despite many challenges and faced by complex problems as described above, DOD

was able to provide \$17.5 million of the \$39 million in relief activities imparted by the U.S. Government during OAD. Between August 13 and September 4, USEUCOM conducted 59 humanitarian missions, delivering a total of 356,380 humanitarian daily rations, 154,368 meals-ready-to-eat, 10,432 cots, 19,184 sleeping bags, 26,422 hygiene kits provided by USAID/OFDA, 9,254 blankets, 6,040 sheets, 3,431 mattresses, 653 boxes of medical supplies, and other relief commodities from DOS and DOD warehouses in Germany and USAID stockpiles in Italy.¹⁰ All told, DOD delivered over 2 million pounds of relief supplies and materiel during the 23-day period of crisis relief operations.

We are a nation that recognizes human suffering and will take action to help. As noted in an article on the 2005 Pakistan relief operation, "Humanitarian assistance and disaster relief remain a powerful strategic way to achieve political ends. In an ideological struggle, HA/DR campaigns project the best of American values abroad."¹¹ Accordingly, it is vitally important to get the logistics aspects of the operation right in order to deliver a timely and effective U.S. Government response, since failing to do so could cause strain in international relations as well as tension within the interagency. **JFQ**

NOTES

¹ Office of U.S. Foreign Disaster Assistance (OFDA), *Annual Report for Fiscal Year 2009*.

² Bureau for Democracy, Conflict and Humanitarian Assistance (DCHA), OFDA, *Georgia—Complex Emergency Fact Sheet #1*, August 14, 2008.

³ Helen Fawkes, "Despair Among Georgia's Displaced," available at <<http://newsbbc.co.uk/2/hi/europe/7572736.stm>>.

⁴ DCHA, OFDA, *Georgia—Complex Emergency Fact Sheet #3*, August 16, 2008.

⁵ Ibid.

⁶ Cynthia Bauer, U.S. Transportation Command Public Affairs, "U.S. Defense Transportation, Distribution Expertise Aids Georgian Refugees," September 2, 2008.

⁷ DCHA, *Fact Sheet #1*.

⁸ Ibid.

⁹ U.S. Southern Command official Web site, accessed September 28, 2010, at <www.southcom.mil/AppsSC/pages/humanitarianAssistance.php>.

¹⁰ DCHA, OFDA, *Georgia—Complex Emergency Fact Sheet #19*, September 30, 2008.

¹¹ William J. Bowers, "Pakistan Earthquake Relief Operations: Leveraging Humanitarian Missions for Strategic Success," *PRISM* 2, no. 1 (December 2010), 132.

Junior Leader PME in the PLA



Implications for the Future

PLA troops await arrival of Defense Secretary Gates in Beijing

U.S. Air Force (Jerry Morrison)

By MARK K. SNAKENBERG

Armies develop leaders for certain purposes, to operate under a common doctrinal approach.¹ Thus, an outside observer can learn much about an army by analyzing its professional military education (PME) and the desired characteristics of the people it produces. Careful analysis of the education and training of an army's junior officers and noncommissioned officers (NCOs) is particularly insightful. The substance of these leaders' instruction indicates the likely development of a foreign army's tactical conduct for the next 5 to 10 years and reveals much about its expectations for warfare at the tactical level during that period. It is therefore a useful tool in conducting predictive analysis of how that army will fight in the near term. However, there is a secondary benefit to studying junior officer PME that is of equal significance. Because it takes 15 to 20 years for junior officers to become senior leaders, military establishments must anticipate two decades in advance what characteristics will be required of its senior leaders and inculcate them into junior leader PME so those personnel are fully prepared to operate under the expected conditions. Thus, study of current junior officer PME may provide a glimpse into a nation's long-term goals and vision of its geopolitical situation.

This article explores the junior leader PME of the People's Liberation Army (PLA) of the People's Republic of China (PRC) in an effort to achieve this insight. Far from a comprehensive examination, this work is intended to provide predictive analysis of Chinese expectations and conduct of tactical operations during the next 5 to 10 years and strategic expectations during the next 15 to 20 years, based on an evaluation of the ongoing development of company-grade officers and NCOs in the army component. Although a number of factors, such as domestic and foreign political considerations, the economy, and social developments, will ultimately determine China's course, this approach is useful in establishing what China wants militarily under ideal conditions, and what problems Beijing expects its military leaders to be able to resolve in the year 2025.

Junior Leader PME and PLA Reform

Historically, the development of all PME within the Chinese army has been nonlinear. That is especially true of junior officers and NCOs.² Tied to internal political requirements as much as global military developments,³ junior leader development evolved erratically since the founding of the PLA in 1927 and has varied in intensity from virtually no education during the Cultural Revolution to today's stated goal of higher education for all officers and NCOs. The current Chinese system must therefore be viewed not as the product of 80 years of uninterrupted development (as in Western armies), but as a manifestation of the Chinese Communist Party's (CCP's) current military goals.

Building upon the limited reforms and dramatic downsizing of the PLA initiated under Deng Xiaoping, in 1995 President Jiang Zemin announced the *Two Transformations* that underpin the current Chinese strategy of *Active Defense*.⁴ Initially based on observations of U.S. military conduct during the 1991 Persian Gulf War against Iraq—and reinforced by lessons from the 1995–1996 Taiwan Strait Crisis, the 1999 Kosovo campaign, and Operations *Enduring Freedom* and *Iraqi Freedom*—these transformations directed the military to prepare for wars under modern, high-tech conditions, and to form an army based on quality, not quantity.⁵ Both of these

study of current junior officer PME may provide a glimpse into nation's long-term goals and vision of its geopolitical situation

transformations represent significant shifts from the historical PLA doctrine and force structure that relied on mass armies of relatively uneducated peasants operating under the concept of "People's War."

Central to the Two Transformations and Chinese leaders' vision of future warfare is the concept of informatization, which is the linchpin of PLA reform and the major evaluation criterion for all operations. Justin Liang and Sarah Snyder, in their definition of *informatization*, say that, "more than just a convenient organizing



principle, [it] is a sophisticated idea about aligning capabilities and requirements in the face of perpetual change [engendered by modern warfare].⁶ To meet the intent of the Two Transformations, the army is significantly reshaping its officer development to produce a well-educated *New Type Officer* capable of conducting informatized warfare through mastery of high technology.⁷ Various indications suggest that this PME reform is taking hold in senior and field-grade officer institutions—traditionally the most important figures in China's centralized military. However, to truly achieve the Two Transformations and challenge modern informatized militaries, the PLA must expand these concepts to junior officer and NCO PME. The following two sections examine whether the Chinese believe this is necessary, and what progress they have made to achieve reform if desired.

NCO PME: A Nascent Professionalism

Judged against historical norms, non-commissioned officer professional military education is significantly advancing within the army from a relatively low starting point; however, analysis reveals that the PLA's current system is unlikely to produce the desired outcome of NCOs capable of operating under informatized conditions without further serious reform. This section explores recent army policy regarding education, contrasts it with current practice, and identifies the system's strengths and weaknesses while evaluating their impact on China's goal of conducting informatized tactical operations.

Historically, the PLA invested very little PME into its NCOs. Early in the PLA's history, the limited instruction received tended to focus on literacy, basic tactics, and political instruction.⁸ After independence, instruction was expanded to include technical training on assigned weapons systems under the Soviet PME model.⁹ The army expended little effort in educating NCOs beyond minimum functional requirements, and did not intend for them to perform any meaningful leadership role. Officially, this trend is changing. As one PLA observer notes:

*Requiring education and training for NCOs is something the PLA is focused on in both the officer and NCO corps. In the case of NCOs, this is to address the need for better educated and more skilled personnel to compensate for its shortcomings on the conscription side of the force and take some of the burden off of officers, as well as to create a more effective NCO corps in a more modernized military.*¹⁰

To meet this challenge, the army increased education standards in 2005, stipulating that "individuals selected as NCOs must have a specified level of education and must go to military academies for training."¹¹ It established a goal of raising all junior NCOs' education levels to high school equivalency, and all senior NCOs to the level of 3-year college (the Chinese equivalent of technical school) graduates by 2008.¹² That year, the PLA added the requirement to possess a relevant certificate of professional qualification for all types and levels of NCO.¹³

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for an army with no tradition of a professional, educated NCO corps, the PLA's goals are revolutionary

For an army with no tradition of a professional, educated NCO corps, the PLA's goals are revolutionary; and in many cases, the PLA's demands exceed the required education levels of NCOs in established informatized armies. Most impressively, evidence is emerging that many NCOs are earning more than one professional certificate.¹⁴ Whether this is a function of wholesale reform or early indication of institutions "teaching the test" to increase the population holding professional degrees remains to be seen.

While the educational goals are clear, the system for achieving them is cumbersome and almost precludes uniform development of quality across the force. Unlike most modern armies, which possess a unified strategy and process for developing NCOs from selection to retirement, the PLA's method is complex and difficult for outsiders to understand based on the fact that "no single Chinese source [outlines] the totality of the training system for conscripts and NCOs."¹⁵ Basically, PME consists of general/technical training, specialty training, and sustainment training. The lack of a clear plan for NCO development stems from the fact that perhaps hundreds of army and civilian activities are responsible for institutional development. Theoretically, three national departments—General Political

Department Cadre, General Staff Department (GSD) Service Arms and Training, and GSD Military Affairs—are responsible for various aspects of the overall program; however, the practice of selecting NCO candidates at the regimental/brigade level from volunteers who extend their service at the conclusion of their 2-year term of conscription, and then sending them to 1 of 35 NCO PME institutions, dozens of civilian universities, or military training centers across the various military regions, severely complicates the PLA's ability to adhere to a common developmental program. Further, graduates of these various institutions receive differing educational experiences: academy graduates receive college core courses and technical training in 2- to 3-year programs; civilian graduates earn a professional certificate or technical degree. Some NCOs do not attend any of these colleges and instead study 2- to 3-year technical courses online or receive training at their units. Some candidates are embedded with operational units to observe and learn the duties of an NCO; others are not. Following general/technical education, candidates receive specialty technical training consisting of 1- to 3-month courses either at a military training center or online before officially becoming an NCO. Responsibility for sustainment training over an NCO's 30-year career¹⁶ is split between corps level for major training and regiment/brigade level for on-the-job training; it is unclear at what intervals/milestones this occurs. Taken as a whole, this system offers significant risk of producing leaders who lack a common doctrinal approach to their profession.¹⁷

Among the many criticisms of this system within the PRC is the argument that current PME produces graduates who are "unable to function in their jobs after graduation from professional military schools"¹⁸ due to lack of line experience. Unlike other modern armies that select seasoned soldiers to serve as NCOs, the PLA identifies an essentially minimally trained soldier as a candidate, sends him to school for up to 3 years, and returns him to a unit where he is expected to supervise similarly inexperienced conscripts. Because young Chinese NCOs—though long on educational and technical knowledge—lack real army experience, junior officers (with a similar lack of line experience) are forced to heavily supervise conscript soldiers—duties best left to NCOs. Although the current system should, in the long term,

produce a senior NCO who is increasingly effective due to his extensive education, in the short term current practices undercut efforts to professionalize the NCO corps by limiting young personnel's experience prior to arrival at their first units. Embedding candidates in colleges/academies with units should help alleviate this problem, but it cannot fix it. Such a program cannot substitute for prolonged daily line experience. This issue must be resolved for the PLA to achieve the Two Transformations.

Of equal significance is the lack of emphasis on leadership development. In this regard, the army is still a prisoner of its tradition of creating technicians. Nearly all the advances in education policy focus on increasing NCO general and technical education—leadership development is conspicuously absent from the discussion. In fact, aside from courses preparing NCOs to become squad leaders, the vast majority of PME focuses on technology—on mastering equipment—rather than leading people. This is as true of induction training as it is of later sustainment PME.¹⁹ This is not to argue that leadership development is not occurring within the context of NCO PME; however, the fact that this aspect of professional preparation is not prominent in studies of the system suggests it is of secondary importance. The informatized battlefield requires NCOs capable of leading independent operations over an increasingly dispersed and complex terrain. Technical training and rudimentary cognitive skills no longer suffice even in the most centralized armies. NCOs must be educated, trained, and empowered to exercise initiative on the battlefield without an officer's direct supervision. Despite its efforts to empower NCOs through reductions in officer strength and assignment of NCOs to duties traditionally performed by junior officers,²⁰ the PLA's continued failure to cultivate leadership and initiative through PME puts the army's attempts to conduct informatized warfare at significant risk.

Clearly, China is embracing the importance of education within its NCO corps.²¹ This represents a major break from PLA tradition and is a key element of achieving the Two Transformations. However, despite significant advances from its low starting point in the late 20th century, the current system contains many flaws that must be reformed in order to produce a truly modern army. In this regard, NCO PME must be considered a work in progress. As analyst Thomas J. Bickford



PLA soldiers train to disassemble and reassemble assault rifle

Xinhua News Service

notes, “an effective educational and training system that is capable of turning out the kind of officers and NCOs the PLA wants . . . is something that takes years to build.”²² The PRC must address these deficiencies before it can succeed in its objective of conducting informatized war at the tactical level.

Developing the New Type Officer

Unlike NCO development, junior officer PME is much discussed within the context of PLA reform and therefore more easily understood by outsiders. Both systems share key similarities including a focus on general/technical education and decentralized accession training. Unlike NCO PME, however, post-accession education is structured and predictable. The PLA's junior officer development is therefore commensurate with other modern militaries and does not require the wholesale reform that NCO education does. In evaluating this system, policy will again be contrasted with practice. Strengths and weaknesses will be identified, and their impacts on conducting informatized operations will be evaluated.

China's officer development is radically changing to produce the desired New Type Officer capable of mastering high technology. Historically, junior officer PME, like NCO PME, developed in a nonlinear manner based on the CCP's prevailing goals, and focused on technical specialization primarily with leader training afforded only to officers selected as platoon or company commanders.²³ All education was through military institutions. This is no longer the case. Starting in 1987, technical and command training were increasingly combined to produce a more-rounded officer.²⁴ Following the U.S triumph over Iraq in 1991, the PLA recognized “the importance both of modern hi-tech conditions and of having officers educated in the new technologies necessary to fight under such conditions. This led to a further deepening of educational reforms and an even greater emphasis on officer education, reflecting a major rethink of the PLA's basic strategy.”²⁵ Since 1999, civilian schools have been increasingly integral to officer development.²⁶ A “process of continuous officer education, requiring officers to periodically upgrade their education and military knowledge”²⁷ is in effect, and promotions are becoming more tied to education and professional skills.

As with its NCOs, China's junior officers come from a variety of sources.

China's officer development is radically changing to produce the desired New Type Officer capable of mastering high technology

Sixty-seven PLA academies provide high school graduates and active duty soldiers an undergraduate education en route to becoming officers, and furnish existing officers with a graduate education.²⁸ Increasingly, however, the army is turning to civilian institutions to provide both advanced degrees and especially pre-accession education, observing a model that approximates the American Reserve Officer Training Corps (ROTC) program.²⁹ As of January 2009, 117 colleges and universities³⁰ provided nearly half³¹ of the PLA's new officers through the National Defense Student program. Chinese leaders reportedly prefer civilian-educated officers because of the questionable quality of PLA educational institutions³² and implicitly believe that “graduates of civilian universities are better geared to leading a modern military.”³³

Following general/technical education, which includes opportunities for civilian cadets to embed with operational units along the NCO model,³⁴ cadets report to a PLA military school to receive pre-assignment training. This includes instruction in basic military subjects and is designed to prepare the officer for duties as a platoon com-

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“Tianhe” supercomputer is one example of resources China has invested in information technology

mander. A later course prepares officers for company command. These courses reportedly promote “active learning [by] encouraging debate, creativity, innovation, and spontaneity.”³⁵ If that is true, they are a far cry from traditional Chinese military instruction, which stressed rote solutions and unquestioning obedience. The validity of this claim is difficult to determine and certainly does not extend to political matters, but the fact that such methods are being paid lip service suggests the PLA takes the requirements of informatized warfare seriously. The practice of pre-assignment training prevails over the rest of the officer's career and indicates a well-thought-out system. What is not known is the quality of instruction at these institutions. Additionally, many Chinese junior officers pursue graduate degrees from a variety of sources including PLA



U.S. Air Force (Jerry Morrison)

institutions, civilian universities, and even the National Defense University.

Taken as a whole, officer development—though again not administered by a single unifying activity—seems to demonstrate real potential for producing personnel capable of conducting informatized operations. The factors potentially precluding this include the suspect quality of PLA pre-accession training, uncertainty as to the extent junior officers are allowed to exercise operational initiative, and the burgeoning Chinese economy, which threatens to entice these well-educated individuals away from army service into corporate life. Compared to its starting point and NCO PME, however, the junior officer system shows great promise in developing the desired New Type Officer. This has tremendous implications for future PLA operational conduct in both the near and far term.

Probable Near-term Implications

Based on an examination of NCO and junior officer PME, the next 5 to 10 years promise to be an era of transition for the PLA at the tactical level of war. Formations are increasingly capable of mastering the sophisticated weapons systems being acquired by the PRC due to increased technical training among NCOs, and officers in turn are increasingly capable of employing these systems effectively. Initially, doctrine will remain defensive but will transition to a more offensive approach as the PLA gains confidence. Sophisticated techniques relying on combined arms and joint tactics are likely to emerge later in the decade based on tactical leaders' intellectual readiness to absorb such advanced methods.

A shortfall in tactical conduct is likely to emerge, however, while implementing these concepts. Successful execution of informatized warfare results from regular field experimentation and detailed analysis of lessons learned over years by multiple units under various conditions. Armies, even if intellectually ready to adopt modern techniques, cannot execute them overnight. Having adopted a doctrine of modern tactical conduct, the PLA will endure a period of frustration at not being able to execute the doctrine in actual field conditions—training or otherwise. This period is likely to last at least half a decade. A window of vulnerability at the tactical level thus emerges between the time current techniques are abandoned and desired techniques are mastered. Compounding the natural difficulty of this transition is the inability of the NCO corps to shed its technician legacy and become a truly professional institution. This is a daunting challenge because it is difficult to create a culture of initiative among personnel who have never been entrusted with significant leadership responsibility. Second, because it runs counter to existing practice, the army will struggle to effectively implement necessary PME reforms in the near term even though it recognizes the desirability of professionalizing the corps. This puts the entire conduct of informatized tactical operations at risk until the deficiency is resolved, and may delay the adoption of modern tactics beyond the anticipated window.

Junior officers will be subject to the same frustrations as the NCO corps, but their participation in informatized warfare experiments over the next 10 years bodes well for

their ability to extend informatization into the operational and strategic realms later in their careers as senior leaders. Today's junior officer is setting the stage for future success.

Over the next decade, China's adversaries should exploit weakness at the tactical level by striking PLA formations quickly, using various means simultaneously and in divergent locations. The resulting tactical problem is likely to overwhelm a command and control system that, although enjoying the trappings of modern computers and communications technology, is still reliant on centralized directions from officers. In potential antinarcotics, peacekeeping, antiterrorism, and counterinsurgency operations, this is a tremendous liability; and during this period, only China's most elite units are likely to be equal to the task of informatized warfare.

Probable Long-term Implications

By 2025, China will be well on the way to achieving its stated goal of "accomplishing mechanization and making major progress in informatization."³⁶ By that time, today's junior officers will have between 15 and 25 years of army service with at least half that time exposing them to informatized warfare. The tactical shortcomings noted above should be mostly resolved within the next 15 years. Additionally, by that time the focus on technical education and credentialing should provide the PRC with one of the world's premier cyber-warfare, electromagnetic warfare, and information warfare capabilities—areas China views as providing it with an asymmetric advantage over potential adversaries. Assuming constant (but not necessarily spectacular) economic growth and political stability, the PLA should be a force capable of physically conducting informatized operational-level maneuver regionally—inadequacy of strategic lift and sustainment capabilities notwithstanding—supported by strategic enablers including the asymmetric advantages mentioned above. Because Taiwan remains the PLA's primary mission, and an invasion requires integration with the navy, air force, and Second Artillery Force, emphasis on joint training and education will continue to escalate. Courses at the National Defense University and recent exercises with Russia are means of educating PLA officers in established joint procedures and might represent an attempt to extrapolate best practices from a military historically recognized for operational excellence. Because of their advanced civilian/military educa-



PLA soldiers train on firing range

Xinhua News Service

focus on technical education should provide the PRC with one of the world's premier cyber-warfare, electromagnetic warfare, and information warfare capabilities

tion and development under informatized conditions, the PLA's officers will be ideally suited to participate in and/or command an invasion of Taiwan if called upon by the CCP. Examining an invasion scenario from the ground forces' point of view, the PLA should be capable by 2025 of defeating Taiwanese forces and successfully challenging modern armies (including the U.S. military) either there or elsewhere in East Asia. The emerging system of junior leader PME is designed to ensure this occurs.

China's anticipated geopolitical situation also lends itself to potential small-scale operations outside the region including peacekeeping, actions to preserve economic interests, and actions to secure ethnic Chinese in foreign countries. By 2025, political leaders will cease viewing PLA capability as a liability and increasingly see the army as providing options when conducting diplomacy or reacting to crises. The temptation to use such a force thus increases, although it is impossible to determine just how attractive such a course will be. Army leaders must be comfortable conducting modern, independent operations supported by other services—an eventuality for which junior officer PME seems to be preparing the leaders of 2025.

Projecting current trends 15 years into the future, the army's structure is likely to be dramatically changed. Barring a major deterioration in CCP/PLA relations or political stability, the PLA will be unified under a single controlling headquarters to facilitate control and joint interoperability rather than broken down into four general headquarters/departments. This development will be facilitated by increased reductions in PLA end-strengths based on increasing defense expenditures, particularly in personnel and equipment modernization. The army is likely to adopt a modular approach to force structuring in line with other modern militaries. Units will increasingly train to common standards. These developments will generate further reforms in PME including consolidation of military schools, reduction or elimination of the PLA's role in providing pre-accession, general/technical education and a corresponding increase in civilian schools'

roles, and a centralized training and education command capable of synchronizing PME for the modular force. Emphasis on technical skills will be reduced in favor of developing strategic competencies including an understanding of the impact of nonmilitary dynamics on military affairs. The generation of officers produced by the PLA in 2025 is likely to compare favorably with the officers produced by other armies in their ability to conceive and execute informatized operations.

Like forecasting the weather, predictive analysis is fraught with the danger of being wrong; however, it is important to provide at least a sense of what the future holds. Various factors outside of PME will impact China's tactical operations over the next decade and its geopolitical situation in 2025, but this work provides a basis for further research and intellectual debate. With China as an emerging power and potential rival in East Asia, the United States and its Army in particular must expend the effort to understand the PLA, its people, and its doctrine. A good first step would be addressing the existing knowledge gaps regarding junior leader PME. In doing so, U.S. leaders may be able to anticipate China's future course and even learn lessons applicable to the U.S. Army, which China views as its most likely competitor. **JFQ**

NOTES

¹ Roy Kamphausen, Andrew Scobell, and Travis Tanner, "Introduction," in *The "People" in the PLA: Recruitment, Training, and Education in China's Military* (Carlisle Barracks, PA: Strategic Studies Institute, 2008), 19, available at <www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=858>.

² Thomas J. Bickford, "Trends in Education and Training, 1924–2007: From Whampoa to Nanjing Polytechnic," in Kamphausen et al., 20.

³ Justin B. Liang and Sarah K. Snyder, "The 'People' in the PLA: Recruitment, Training, and Education in China's 80-Year-Old Military," 2, available at <www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=834>.

⁴ Information Office of the State Council of the People's Republic of China (Information Office), *China's National Defense in 2008* (Beijing: Information Office, 2009), 7–8, available at <www.cfr.org/publication/18292>.

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PLA land, naval, and air forces conduct joint exercise to improve combat capabilities

⁵ Kristen Gunness and Fred Vellucci, "Reforming the Officer Corps: Keeping the College Grads In, the Peasants Out, and the Incompetent Down," in Kamphausen et al., 192.

⁶ Liang and Snyder, 3.

⁷ Gunness and Vellucci, 192–193.

⁸ Bickford, 25.

⁹ Ibid., 27.

¹⁰ Gunness and Vellucci, 200–201.

¹¹ Ibid., 201.

¹² Ibid., 211.

¹³ Dennis J. Blasko, "PLA Conscript and Noncommissioned Officer Individual Training," in Kamphausen et al., 112.

¹⁴ Ibid.

¹⁵ Ibid., 125.

¹⁶ Gunness and Vellucci, 200.

¹⁷ For detailed treatment of the varieties of PLA NCO education, refer to Blasko.

¹⁸ Ibid., 115.

¹⁹ Gunness and Vellucci, 211.

²⁰ Ibid., 193.

²¹ Blasko, 126.

²² Bickford, 20.

²³ Ibid., 27.

²⁴ Ibid., 33.

²⁵ Ibid., 34.

²⁶ Ibid., 36.

²⁷ Ibid., 35.

²⁸ John F. Corbett, Jr., Edward C. O'Dowd, and David D. Chen, "Building the Fighting Strength: PLA Officer Accession, Education, Training, and Utilization," in Kamphausen et al., 144.

²⁹ Corbett et al., 147.

³⁰ Information Office, 17.

³¹ Liang and Snyder, 2.

³² Corbett et al., 156–157.

³³ Kamphausen et al., 8.

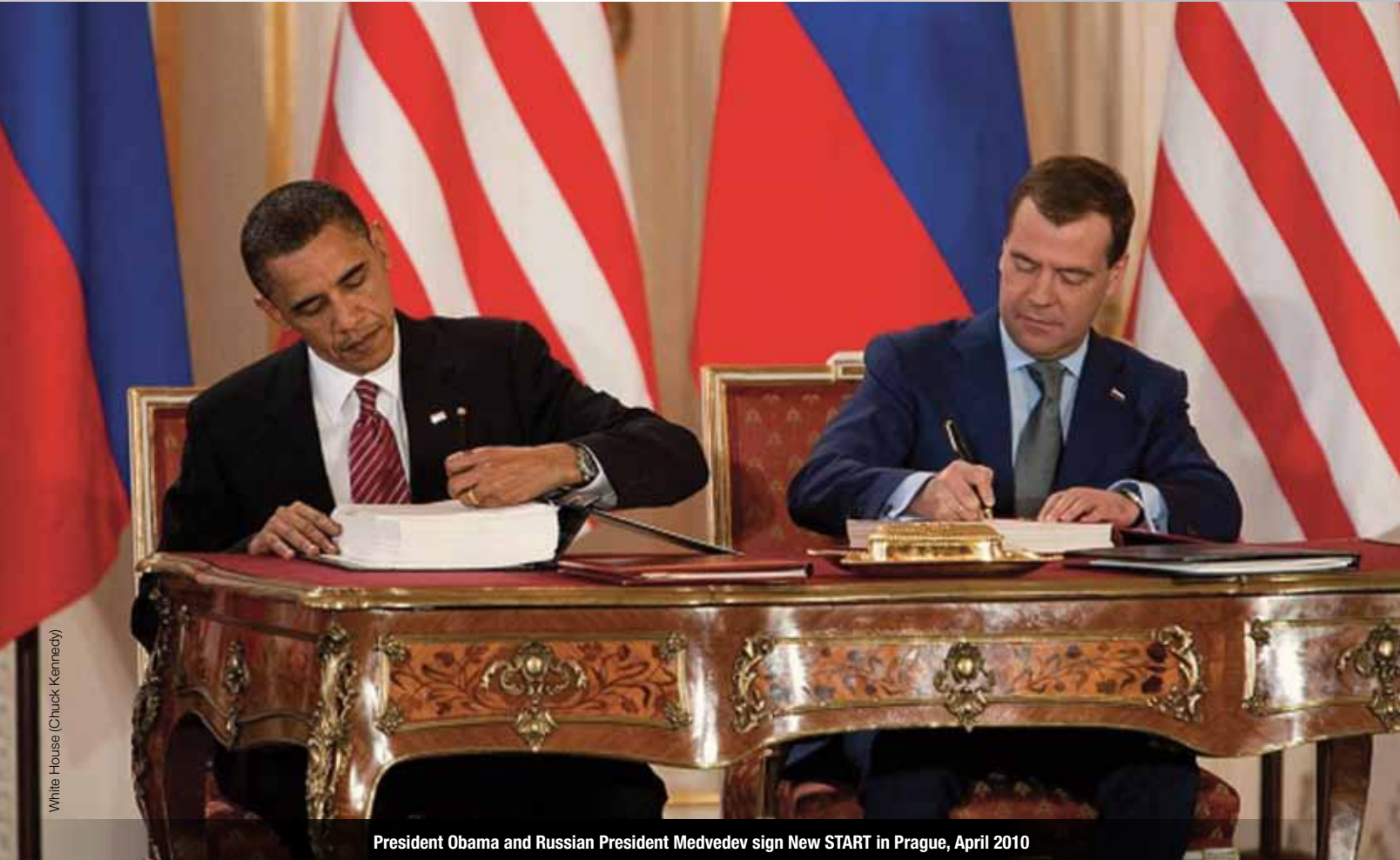
³⁴ Corbett et al., 156.

³⁵ Bickford, 36.

³⁶ Information Office, 7.

Matrix OF Nonlinearity

Minimum Deterrence, Missile Defenses, and Nuclear Arms Reductions



White House (Chuck Kennedy)

President Obama and Russian President Medvedev sign New START in Prague, April 2010

By STEPHEN J. CIMBALA

The strategic nuclear arms reductions of the Cold War era may have been procedurally painstaking, but they took place in a relatively uncomplicated technology and policy world compared to now. The New Strategic Arms Reduction Treaty (START), which entered into force in February 2010, is a possible bridge between the *sitzkrieg* era of nuclear superpower arms control and the more demanding requirements of the early 21st century. The context for post-New START is highly embedded in national security policy complexity, including:

- the possible, but uncertain, continuation of the “reset” in U.S.-Russian political relations
- U.S. interest in maintaining Russian political support for North Atlantic Treaty Organization (NATO) diplomatic and military actions in Afghanistan, and Russian-American convergent interests on the issue of preventing terrorism

■ Russia's declared intention to modernize its conventional and nuclear armed forces, including drastic reforms in conventional force structure and operations designed to leave behind the mass mobilization and conscript-based military of the past in favor of a smaller, more professional, and more deployable force

■ Russia's 2010 military doctrine that leaves the United States and NATO among the placeholders for threat assessment, but without attributing to either a proximate menace, while acknowledging that the threat of global or major coalition war is less immediate than that of local wars and unconventional conflicts.

Even within the narrower spectrum of arms control per se, as between Russia and its arms control interlocutors, there is no obvious or uncontested next step after New START. On one hand, prominent experts, including former Russian and American foreign policy officials, have urged a speedup in implementing the New START reductions, perhaps by as much as 4 years ahead of the agreed treaty schedule.¹ In addition, the Obama administration has already directed the Department of Defense (DOD) to consider the feasibility of additional reductions below New START levels.² On the other hand, some American politicians might be leery about revisiting the spirited New START ratification debates in a post-New START framework any time soon.

U.S. and NATO plans to deploy missile defenses in Europe increase the uncertainties related to post-New START reductions in long-range offensive nuclear weapons and launchers. The Obama administration plan for future ballistic missile defense (BMD) deployments in Europe, although less provocative to the Kremlin than the earlier proposal by George W. Bush, roiled the debate over New START and promises to figure into any post-New START negotiations.³ On the other hand, NATO and Russia in March 2011 began high-level talks on possible cooperation in developing and operating a European regional missile defense system.⁴ Can a possible path to minimum deterrence, based on post-New START reductions in offensive nuclear weapons, coexist peacefully with joint or singular missile defense deployments in Europe by NATO and Russia? This article considers some of the political and military backdrop

minimum deterrence might be acceptable to military planners who want to maintain a viable U.S. nuclear deterrent at an acceptable cost

for any transition to a post-New START regime of minimum deterrence by the United States and Russia compared to the currently shrink-wrapped version of assured destruction or assured retaliation. Second, it analyzes whether a minimum deterrence regime at either of two levels could provide for U.S. and Russian nuclear security and deterrence stability. Third, it discusses how defenses might complicate the picture of offensive force reductions as described.

Everything Old Is New Again

The idea of minimum deterrence has caught fire among civilian and military policy analysts and other close students of nuclear arms control. Minimum deterrence might seem an acceptable alternative to the more utopian construct of nuclear abolition, endorsed in principle by President Barack Obama and a number of leading former policymakers and military commanders. Minimum deterrence might also be acceptable to military planners who want to maintain a viable U.S. nuclear deterrent at an acceptable cost. In addition, experts on nuclear nonproliferation might favor minimum deterrence as a way station toward multilateral nuclear arms reductions and further measures of cooperative threat reduction, as among nuclear weapons states as well as nuclear-threshold or nuclear aspiring powers.⁵

However, discussion of minimum deterrence can bring participants into the land of mystery and confusion, unless the discussion is disciplined by political and military-strategic clarity. A nuclear deterrent force can be described as "minimum" or "maximum" depending on the security dilemmas facing various states, including their expectations about probable opponents' security objectives, military capabilities, and decisionmaking styles. Pakistan, Great Britain, and Israel are all regarded as nuclear weapons states, but their perceived security dilemmas, expectations about deterrence requirements, and decisionmaking patterns vary markedly. Minimum deterrence is not one remedy that fits all states, but a conceptual framework

that could induce helpful expectations about deterrence stability and security cooperation, given favorable political winds. From the same perspective, the "adequacy" of a minimum or larger deterrent cannot be defined by numbers of weapons alone, but by the political and military-strategic context within which they might be used—for deterrence or otherwise.

Defining minimum deterrence for a plurality of worlds poses a potentially open-ended research agenda. The present international system, or possible iterations of it during the first quarter of the 21st century, offers a sufficient number of uncertainties and unknowns to challenge theorists and planners. What might minimum nuclear deterrence mean in the present and near term,



Ground-based interceptor is launched from Vandenberg Air Force Base during test of ground-based interceptor system

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given the inexorable weight of precedent on policymakers and on their available options? How viable might any minimum deterrence regime be, even if agreed to by the leading nuclear weapons states or all of them?

Definitions and Measurements

The meaning of *minimum* deterrence is not necessarily obvious without having addressed the question, “Compared to what?” Nuclear strategists would probably agree that minimum deterrence lies somewhere between assured destruction, as emphasized during Cold War discussions about nuclear strategy, and nuclear abolition. Exactly where is more debatable. At least four kinds of variables are in play in classifying nuclear strategies:

- political and military objectives for which forces are tasked
- specifics of nuclear targeting plans, related to retaliatory objectives but not necessarily reflecting the actual intent of policymakers
- numbers of weapons and launchers deployed and their assumed rates of survivability against first or later strikes
- command and control systems and operational protocols of the state’s nuclear forces including their dependency on high states of alert or prompt launch for survivability.

During the high Cold War, this might have led to a spectrum of possible nuclear deterrent strategies as summarized below.

The table cannot capture all the nuances or possible variations within and among these three kinds of strategies. In addition, states’ declaratory strategies are not always consistent with their operational policies.⁶ But the table illustrates some of the qualitative and quantitative points of similarity and difference among these kinds of generic nuclear strategies.

For present purposes, minimum deterrence in today’s world implies that U.S. and Russian arsenals would be limited to a maximum of 1,000 operationally deployed strategic nuclear weapons, or fewer if possible. “Fewer if possible” means that for Washington and Moscow to go below 1,000 deployed weapons on transoceanic or intercontinental launchers, other acknowledged nuclear weapons states would have to commit to proportional reductions and/or limitations. Substrategic nuclear weapons, including tactical or operational weapons deployed on land or at sea or air delivered, have both political and military-operational contexts requiring separate discussion. There is certainly the possibility that, in any multilateral, constrained nuclear proliferation regime, some weapons of medium or intermediate range might have to be included as “strategic”



U.S. Navy
Missile launched from Japanese Maritime Self-Defense Force destroyer successfully intercepted ballistic missile target fired from Hawaii

minimum deterrence in today’s world implies that U.S. and Russian arsenals would be limited to a maximum of 1,000 operationally deployed strategic nuclear weapons

Attributes of Generic Nuclear Deterrence Strategies			
	Counterforce-warfightin	Assured destruction	Minimum deterrence
Objectives and targeting	Victory or “prevailing” in a protracted conflict by imposing escalation dominance on the opponent at any phase	Inflicting retaliatory strikes sufficient to impose “unacceptable” damage on any attacker, including its remaining forces; command, control, and communications (C ³); industry; and population	Imposing unacceptable damage to the attacker’s society and civilian population and/or national infrastructure, although with forces less than those required for assured destruction
Numbers of weapons launchers required	Numbers of survivable weapons capable of attacking or holding at risk military, C ³ , industry, and population targets, if necessary through phases of a protracted war. May also require antimissile defenses for protecting population and/or forces. Requires numbers of deployed warheads in the thousands, well above the threshold for assured destruction.	Numbers of survivable weapons capable of attacking military, C ³ , industry, and population targets and inflicting “unacceptable” damage. Allows for flexible targeting but does not envision fighting a protracted nuclear war to a successful conclusion. Requires numbers of deployed warheads in the thousands, fewer than required for counterforce-warfighting strategies.	Numbers of survivable weapons sufficient to destroy major infrastructure and the sinews of a modern national economy, while not necessarily emphasizing the destruction of urban-industrial areas, but also not necessarily guaranteeing “city avoidance.” Requires numbers of deployed warheads in the hundreds.
Command-control and alert-launch protocols	Political and military C ³ must be not only survivable against initial attacks but enduring through various phases of a protracted conflict. Some proportion of the force will be on hair trigger alert even in peacetime.	Political and military C ³ must be survivable for second-strike retaliation and for postattack negotiation for war termination. No forces on high alert required in peacetime but not precluded either.	Political and military C ³ must be survivable for second-strike retaliation. No forces on high alert in peacetime.

Sources: Author. See also Robert Jervis, *The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon* (Ithaca: Cornell University Press, 1989), 74–106; Scott D. Sagan, *Moving Targets: Nuclear Strategy and National Security* (Princeton: Princeton University Press, 1989), esp. 58–97; Desmond Ball, “The Development of the SIOP, 1960–1983,” in *Strategic Nuclear Targeting*, ed. Desmond Ball and Jeffrey Richelson (Ithaca: Cornell University Press, 1986), 57–83; Robert Jervis, *The Illogic of American Nuclear Strategy* (Ithaca: Cornell University Press, 1984), esp. chapters 3 and 4; and Desmond Ball, “U.S. Strategic Forces: How Would They Be Used?” in *Strategy and Nuclear Deterrence*, ed. Steven E. Miller (Princeton: Princeton University Press, 1984), 215–244.

based on their potential effects against likely regional adversaries.

The figures that follow permit us to examine the deterrence stability of two minimum deterrence regimes.⁷ In the first case, U.S. and Russian strategic nuclear forces are limited to a maximum of 1,000 operationally deployed weapons for each state. In the second case, a lower limit of 500 operationally deployed weapons is imposed on each. For these larger and smaller minimum deterrent forces, we calculate their expected numbers of second strike surviving and retaliating warheads under four operational options of alertness and launch protocols: generated alert and launch on warning; generated alert, riding out the attack, and retaliating; day-to-day alert and launch on warning; and day-to-day alert and riding out the attack. One might anticipate that, in general, the numbers of surviving and retaliating warheads would diminish as we proceed from the first to fourth option, but that progression is not necessarily automatic, depending on the specific circumstances of attack and response. In addition, for purposes of comparison, each state's 1,000 or 500 maximum deployed forces are deployed with four alternative force structures: for the United States, these include a balanced triad of intercontinental ballistic missiles (ICBMs), submarine-launched ballistic missiles (SLBMs), and bomber delivered weapons; a dyad of SLBMs and bombers without land-based missiles; a dyad of ICBMs and SLBMs without bombers; and a force made up entirely of SLBMs. For Russia, the alternative force structures include a triad of land- and sea-based missiles and bombers; a dyad of land- and sea-based missiles; a dyad of land-based missiles and bombers; and a force composed entirely of ICBMs. (Although triads might seem to have been decided upon by both states as their preferred configurations, Russia's current and prospective force modernization problems, as well as U.S. current and foreseeable deficits, make the consideration of alternative force structures more than a heuristic exercise.)

The results of this analysis appear in figures 1 and 2. Figure 1 shows the strategic nuclear retaliatory forces of Russia and the United States under a maximum limit of 1,000 deployed weapons for each state. Figure 2 summarizes the numbers of second strike surviving and retaliating warheads for the United States and Russia, under each of the operational conditions listed above, for the case of

Figure 1. U.S.-Russia Total Strategic Weapons (1,000 deployment limit)

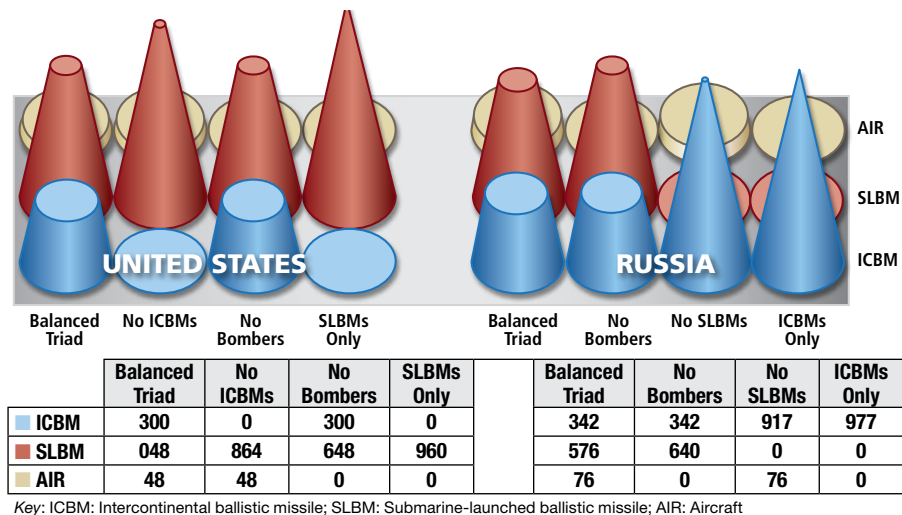


Figure 2. U.S.-Russia Surviving and Retaliating Warheads (1,000 deployment limit)

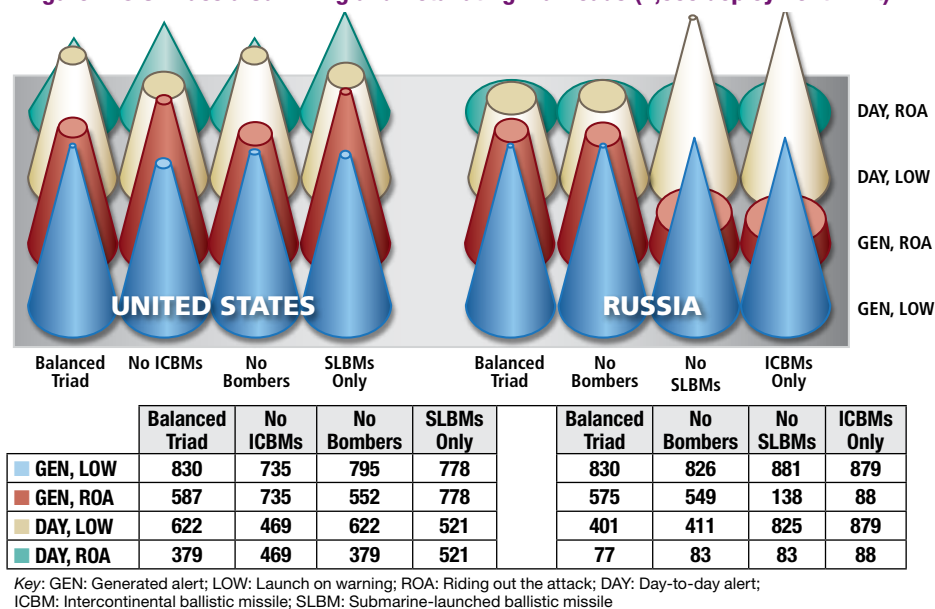


Figure 3. U.S.-Russia Total Strategic Weapons (500 deployment limit)

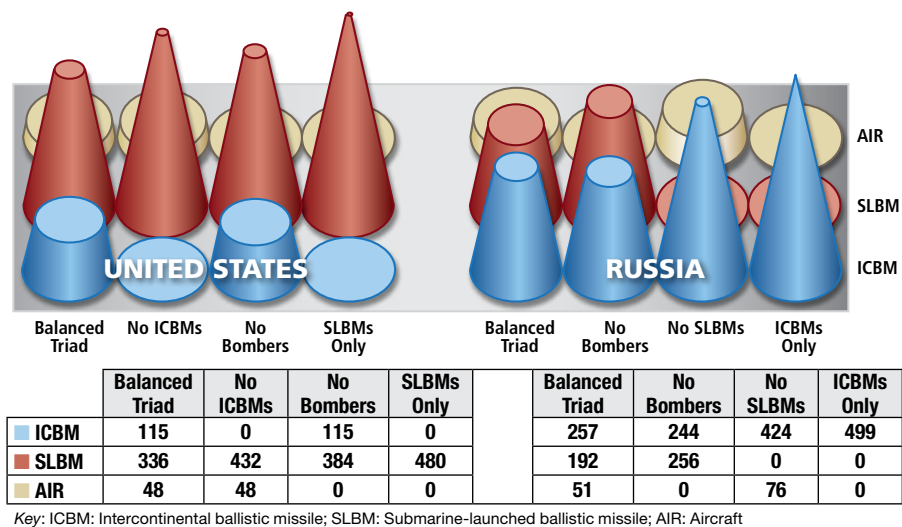
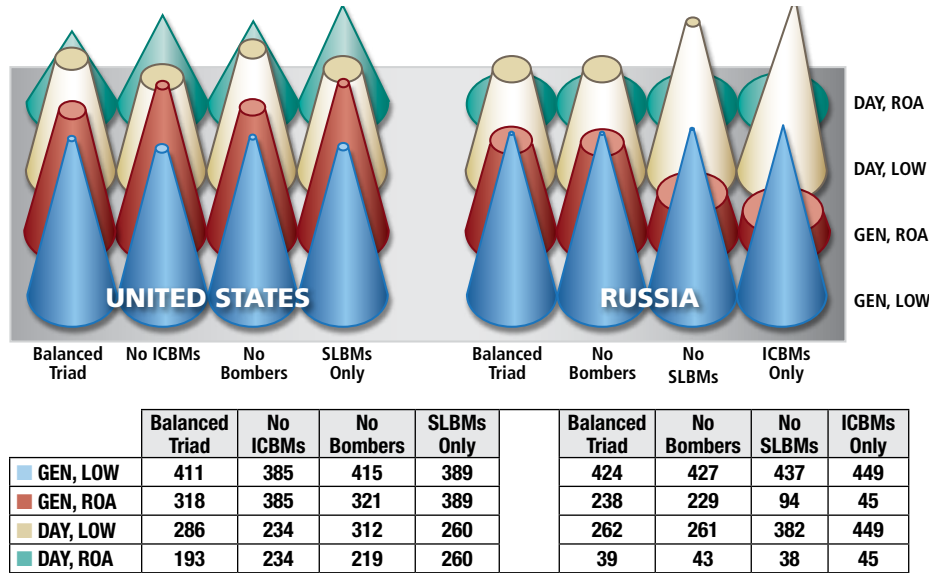


Figure 4. U.S.-Russia Surviving and Retaliating Warheads (500 deployment limit)



Key: GEN: Generated alert; LOW: Launch on warning; ROA: Riding out the attack; DAY: Day-to-day alert; ICBM: Intercontinental ballistic missile; SLBM: Submarine-launched ballistic missile

1,000 maximum deployed weapons for each country. Figure 3 shows the peacetime forces of each state under a lower maximum limit of 500 deployed weapons, and figure 4 provides information equivalent to that summarized in figure 2, but for the more restrictive case in which maximum deployments are capped at 500 weapons for each.

The results summarized in figures 2 and 4 show that either the 1,000 maximum-minimum deterrence regime or the 500 maximum alternative provides for sufficient numbers of second strike surviving and retaliating warheads to guarantee unacceptable retaliation under each of four operational conditions. Russian and American forces provide for several hundred retaliating weapons under a deployment limit of 1,000 with the exception of Russian forces under the “day-to-day alert, riding out the attack” configuration. However, under the conditions of any political crisis in which the United States and Russia were actually considering the use of nuclear weapons, both states’ forces would doubtless be raised to higher alert levels and/or poised for prompt instead of delayed launch. In the canonical case often used for analysis (but

not necessarily reflecting the likelihood of actual operations), either Russia or the United States, under conditions of “generated alert, riding out the attack” could provide for some hundreds of retaliating weapons across various force postures. When the prewar deployed forces are reduced to a maximum of 500 weapons, each state still retains enough second strike retaliatory power to inflict socially and politically unacceptable damage regardless of the force posture or condition of operational readiness.

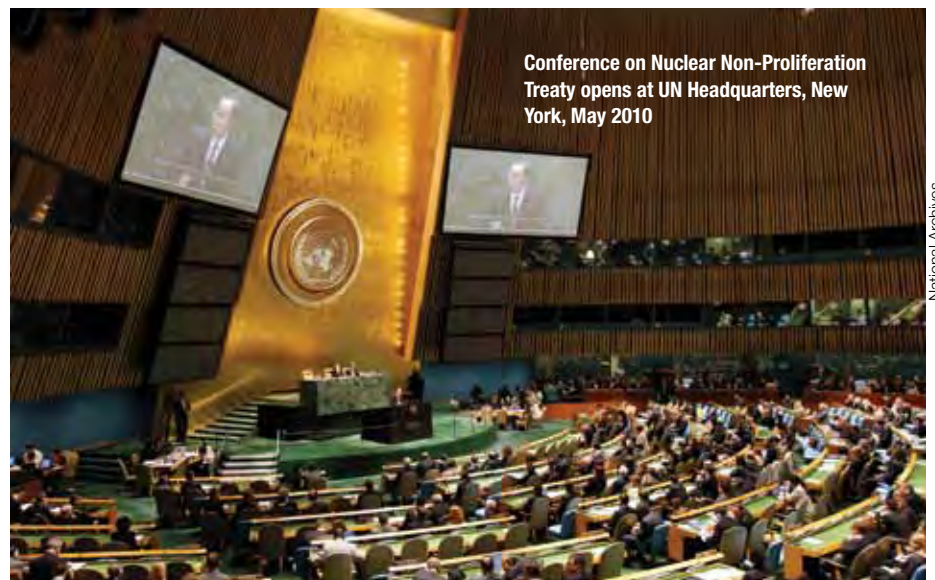
Missile Defenses—Again

The preceding figures are necessarily hypothetical outcomes for nuclear force exchanges under each of the two regimes.

However, proposals to reduce U.S. or Russian forces to these post-New START levels may fail in politics despite the claims of analysts. One of the obvious speed bumps for Russia is the revised U.S. plan to deploy phased adaptive missile defenses in Europe.⁸ Russian leaders have insisted that they must be involved in U.S. and NATO missile defense planning, deployments, and operations. During the NATO-Russia Summit in Lisbon in November 2010, Russian President Dmitry Medvedev agreed to future talks with NATO about joint missile defense deployments. In February 2011, Medvedev appointed Russian ambassador to NATO Dmitri Rogozin as the special presidential envoy for missile defense, adding to the presumed diplomatic status of the issue.⁹ On the other hand, both Medvedev and Russian Prime Minister Vladimir Putin warned in November 2010 that any U.S.-NATO European missile defense plan that excluded Russia could lead to a nuclear arms race, including new deployments by Russia of offensive nuclear weapons and “strike forces.”¹⁰

Russia’s objections to U.S. missile defenses deployed in Europe under the NATO aegis have more to do with politics than with the logic of nuclear deterrence.¹¹ The inferiority of Russia’s conventional forces to those of NATO makes Russia more reliant on its nuclear forces for missions other than deterrence of a U.S. or NATO nuclear first strike. Russia’s military doctrine allows for the first use of nuclear weapons by Russia in a conventional war that includes attacks near Russia’s periphery or into Russia’s state territory with the potential to jeopardize its vital interests

Russian leaders have insisted that they must be involved in U.S. and NATO missile defense planning, deployments, and operations



Conference on Nuclear Non-Proliferation Treaty opens at UN Headquarters, New York, May 2010

National Archives

it can be argued that deploying U.S.–NATO or Russian missile defenses is necessary to help deter or defeat attacks from nuclear hostiles such as Iran or North Korea

and sovereignty.¹² Russia in particular fears NATO capabilities for conventional deep strike missions and the Alliance's relative superiority in information-based technologies for conventional warfare. However improbable or illogical these Russian concerns might seem from a U.S. or NATO perspective, Russia's sense of conventional military inferiority invites its military planners to fill in the gap with its nonstrategic nuclear weapons for deterrence and escalation control.

Politics as well as military art also dictate that Russia hold fast to its image of strategic nuclear parity with the United States. This perception of Russia and the United States sharing a singularity in strategic nuclear capabilities compared to other powers carries political overbite for Russian negotiators in various international forums and provides Russia a toehold on great power military status. Russia's sensitivities about U.S. missile defenses are as much about this perception of Russian-American strategic nuclear equivalence regardless of military-technical realities. Thus, fears expressed by Russia's politicians and military divas about a creeping U.S. nuclear first strike capability are not based on realistic perceptions of American intentions. Instead, these sentiments perform two functions in Russian domestic politics. First, the Russian general staff can continue to use NATO and the United States as bell ringers in threat assessments. Second, NATO-centric threat assessments help to forestall the transition from a

mass mobilization army based on conscripts to a professional army, the latter structured around brigades manned with voluntary contract soldiers and trained for rapid deployment into hybrid wars with conventional and/or unconventional features.

Politics excepted, are Russian concerns about future NATO missile defense capabilities entirely self-serving? By the last phase of Obama's European missile defense plan in 2020, U.S. BMD technology will presumably have improved over present models. Fourth-generation SM-3 interceptors and supporting command, control, communications (C³), computers, intelligence, surveillance, and reconnaissance could conceivably have some intercept capabilities against intercontinental missiles launched from Russia or elsewhere, especially if the missile defense launchers were widely deployed across terrestrial and maritime space. On the other hand, whether the Obama plan provides "game changing" missile defenses depends upon Russia's fulfillment of its offensive missile modernization plans, including possible countermeasures against defenses. An additional complication is that futuristic antimissile defenses will have some commonality with technologies also contributory to air defenses against bomber attack. Further uncertainty exists in the politics of NATO decisionmaking with respect to which member states will host missile interceptors or other components of the regional missile defense system—with the possibility that those hosts



U.S. Army (Lawrence Roscoe Washington, Jr.)

Soldier trains Polish servicemembers to maintain Patriot missile system during first-ever rotational training program held in Poland

will feel Russian pressure or even threats of targeting by Russian nuclear forces.

It can be argued that deploying U.S.–NATO or Russian missile defenses is necessary to help deter or defeat attacks from nuclear hostiles such as Iran or North Korea. Defenses can provide insurance against the consequences of light attacks, although those same technologies could not preclude an American or Russian second strike, thereby leaving a mutual deterrence relationship between Washington and Moscow intact. Devils remain in the details, including whether a Euro-zone BMD would be managed and operated as a unified structure with NATO and Russian substations, or as a collaborative endeavor with shared early warning and launch detection systems but separately operated NATO and Russian C³ and launch decisions. Whether politically fused or decentralized, a Euro-zone missile defense system based on NATO-Russian partnership invites hubristic proposals from software consultants.

A U.S.–Russian minimum deterrence regime with a maximum of 1,000 or 500 deployed long-range nuclear warheads could certainly provide for adequate numbers of surviving and retaliating weapons to ensure

Admiral Mullen meets with South Korean defense officials in Seoul to confirm strength of U.S.–South Korea alliance during tensions with North Korea



U.S. Navy (Chad J. McNeeley)



for the

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Africa's Evolving Infosystems: A Pathway to Security and Stability

Political instability and violence in Africa are often the products of rumor and misinformation.

Against this backdrop, Steven Livingston shows that the emergence of new information and communication technologies—together with new democratic institutions—is noteworthy. In the past 5 years, the annual growth rate for mobile telephones in Africa has been 65 percent—more than twice the global average. Linked by these new technologies and geographical information systems, civil society networks in Africa now are able to monitor security, provide health care information, create banking services, and provide marketing information to farmers. Mobile communications has helped to create new institutions that promote transparency, accountability, and security. This research paper traces the remarkable development of these infosystems and their effects in Africa. The paper recommends supporting African innovation centers as well as basic research on the political, economic, and security implications of local networks created by mobile telephony and related technologies.



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FEATURES | Matrix of Nonlinearity

deterrence and crisis stability. If political relations between the two states continue to improve, the probability increases for an agreed minimum deterrence standard that becomes the new benchmark for bilateral negotiations (and, perhaps, for multilateral excursions into strategic nuclear force reductions or arms limitations). On the other hand, the overlap of minimum deterrence and missile defenses is sufficiently complicated to keep NATO and Russian arms control negotiators engaged in continued technical and political skirmishing. Additional nonlinearity in the post-New START arms control equation will be introduced by U.S. interest in reducing the numbers of nonstrategic nuclear weapons deployed in Europe and by Russia's equally strong interest in rearranging the Treaty on Conventional Forces in Europe in view of its conventional military inferiority relative to NATO. **JFQ**

NOTES

¹ For example, see Scott Sagan, "After the Nuclear Posture Review: Obama's disarming influence," *Bulletin of the Atomic Scientists*, April 19, 2011, available at <www.thebulletin.org/print/web-edition/features/-after-the-nuclear-posture-review>; Robert Bridge, "Albright and Ivanov make the case for early US-Russian strategic arms cuts," April 8, 2011, available at <<http://rt.com/politics/russia-america-albright-ivanov-start/>>.

² See "Pentagon Studying Additional Nuke Reductions," *Global Security Newswire*, March 23, 2011, available at <http://gsn.nti.org/siteservices/print_friendly.php>.

³ On current and prospective U.S. missile defense programs, see Unclassified Statement of Lieutenant General Patrick J. O'Reilly, Director, Missile Defense Agency, before the House Armed Services Committee (HASC), Subcommittee on Strategic Forces, Regarding the *Fiscal Year 2011 Missile Defense Programs* (Washington, DC: HASC, April 15, 2010). Arguments for a more ambitious program in missile defenses than the Obama plan appear in James Jay Carafano, "Resetting Missile Defenses," available at <www.fpri.org/enotes/201104.carafano.missiledefense.html>.

⁴ See, for example, "Russia, EU should set up expert group for missile shield talks," April 14, 2011, available at <<http://en.rian.ru/world/20110415/163535943.html>>; and Simone Baribeau and Henry Meyer, "Russia Wants 'Red Button' Rights on U.S. Missile-Defense Systems," April 8, 2011, available at <www.businessweek.com/news/2011-04-08/russia-wants-red-button-rights-on-u-s-missile-defense-system.html>.

⁵ See Center for Counterproliferation Research and Center for Global Security Research, *U.S.*

Nuclear Policy in the 21st Century: A Fresh Look at National Strategy and Requirements: Final Report (Washington, DC: U.S. Government Printing Office, 1998), especially 3.15–3.18, on the practicality of nuclear abolition or drastic reductions in the U.S. nuclear arsenal to hundreds of weapons.

⁶ On this point, see especially Desmond Ball, "The Development of the SIOP, 1960–1983," in *Strategic Nuclear Targeting*, ed. Desmond Ball and Jeffrey Richelson (Ithaca, NY: Cornell University Press, 1986), 57–83; and Ball, "U.S. Strategic Forces: How Would They Be Used?" in *Strategy and Nuclear Deterrence*, ed. Steven E. Miller (Princeton: Princeton University Press, 1984), 215–244.

⁷ Grateful acknowledgment is made to Dr. James Scouras for the use of his @AWSM model as modified by the author. He has no responsibility for its use here, nor for any arguments or conclusions in this study.

⁸ "US launches new missile defense program for Europe," Associated Press, March 1, 2011, available at <www.cbsnews.com/stories/2011/03/01/ap/business/main20038019.shtml>; "U.S. Says Radar Ship Deployment Part of Missile-Defense Shield," Radio Free Europe/Radio Liberty, March 2, 2011, available at <www.rferl.org/content/us_says_radar_ship_deployment_part_of_missile_defense_shield/2325314.html>.

⁹ "Russia Profile Weekly Experts Panel: Russia Raising the Stakes on Missile Defense," February 25, 2011, available at <http://russiaprofile.org/experts_panel/32937.html>.

¹⁰ "Warning of New Arms Race, Medvedev Calls for Cooperation with West on Missile Shield," Radio Free Europe/Radio Liberty, available at <www.rferl.org/content/russia_medvedev_parliament/2234566.html>.

¹¹ Yuri Solomonov, expert missile designer at the Moscow Institute of Thermal Technology, told a press conference in March 2011 that the proposed U.S. missile defense plan for Europe presented no threat to Russian strategic nuclear forces. He added that European missile defense agitation "is created by politicians on one side and the other for gaining certain concessions and resolving totally unrelated problems with package agreements." See "U.S. missile defense in Europe does not threaten Russia—Solomonov," *Interfax*, March 17, 2011.

¹² "The Military Doctrine of the Russian Federation," February 20, 2010, available at <www.sras.org/military_doctrine_russian_federation_2010>.

The Arctic

A New Partnership Paradigm or the Next "Cold War"?

By REGINALD R. SMITH

Global climate change is bringing about epochal transformation in the Arctic region, most notably through the melting of the polar ice cap. The impact of these changes, and how the global community reacts, may very well be the most important and far-reaching body of issues humanity has yet faced in this new century. A number of nations bordering the Arctic have made broad strides toward exercising their perceived sovereign rights in the

region, and all except the United States have acceded to the United Nations Convention on the Law of the Sea (UNCLOS), which provides an international legal basis for these rights and claims.¹ Similarly, while most Arctic nations have been planning, preparing, and programming resources for many years in anticipation of the Arctic thaw, the United States has been slow to act on any of the substantive steps necessary for the exercise of sovereign rights or the preservation of vital national interests in the region.²

The United States must move outside the construct of unilateral action in order to preserve its sovereign rights in the Arctic, capitalize on the opportunities available, and safeguard vital national interests in the region. In today's budget-constrained environment and as a Nation at war with higher resource priorities in Iraq and Afghanistan than in the Arctic, it is unrealistic to believe that any significant allocation will be programmed for addressing this issue.³ Since the United States is too far behind in actions necessary to preserve its critical interests as compared to the other Arctic countries, the Nation must take the lead to cultivate a new multilateral partnership paradigm in the region.

U.S. Navy (Kevin S. O'Brien)

USS *Connecticut* crew clears ice from hatch after surfacing in Arctic Ocean during exercise ICEX 2011

A new partnership framework is vital to pooling the many capabilities of the Arctic nations and ultimately leveraging them for the preservation of U.S. interests. Analysis shows a dearth of unifying military partnership constructs on anything other than a bilateral or trilateral basis and reveals that search and rescue (SAR) operations may be the glue that ultimately binds the Arctic nations' military forces together. While the opportunity for and types of partnerships are expansive, the scope of the recommendations is limited to accession to UNCLOS, sponsorship of a unifying multinational Arctic exercise, and establishment of a comprehensive military partnership framework. To this end, background information illustrating the magnitude of the problem is offered, followed by a brief review of differing opinions on U.S. partnership, analysis of the actions and preparedness of other Arctic nations, examination of some existing partnership frameworks and opportunities, and concluding recommendations for the U.S. theater-strategic leader in the Arctic.

Background

The Arctic is the fastest-warming region on the planet, and scientific models forecast an ice-free summer Arctic sea within 30 years, with some predictions as early as 2013.⁴ As the Arctic ice cap recedes, expansive virgin areas rich in natural resources and new, commercially lucrative maritime routes will open for exploitation by those nations most prepared to capitalize on these opportunities. The potential for economic gain is enormous as 10 percent of the world's known and an estimated 25 percent of undiscovered hydrocarbon resources, 84 percent of which are offshore, exist in the region.⁵ Transport of these resources poses high profit potential as well. For example, tanker traffic between northern Russian terminals and Southeast Asian ports can save \$1 million in fuel costs using an Arctic routing instead of the Suez Canal.⁶ Those countries with the requisite capability stand to be handsomely rewarded.

An essential resource in the Arctic is a fleet of ships capable of icebreaking operations. They are needed not only for the maintenance of waterways and ship escort when sea ice is present, but also for year-round

two of the three U.S. Coast Guard icebreakers that constitute America's entire heavy ice capability have exceeded their service lives and are currently nonoperational

sovereignty projection, SAR, resource protection, and rule of law enforcement. Notably, none of the U.S. icebreakers is configured for these additional duties.⁷ *Polar Sea* and *Polar Star*, two of the three U.S. Coast Guard icebreakers that constitute America's entire heavy ice capability, have exceeded their service lives and are currently nonoperational.⁸ *Polar Sea* is undergoing repairs with an expected return-to-service date of June 2011; *Polar Star* requires extensive repairs and upgrades with an expected completion in 2013.⁹ The third icebreaker is a medium-class ship that is configured for scientific research support and is unable to handle thick Arctic ice. Cost estimates in 2008 dollars are \$800 million to \$925 million for a new icebreaker with a 10-year lead time and \$800 million to extend the lives of the two *Polar*-class ships.¹⁰ The National Research Council in its 2007 report to Congress stated that "U.S. icebreaking capability is now at risk of being unable to support national interests in the north and the south."¹¹

In contrast, the Russians and the Canadians maintain fleets that are over six times and four times larger, respectively, than that of the United States.¹² To catch up with other Arctic nations in icebreaking capability alone, the expenditure would be at least \$20 billion and would take decades to complete.¹³ While the icebreaker issue outlined above is but one of many aspects of the U.S. inability to address vital national interests in the Arctic, it is indicative of the magnitude of the problem facing this nation. With little organic capability in the region, partnership may seem a natural solution to the U.S. Arctic issues, with accession to UNCLOS providing the international cooperative basis for further multilateral endeavors. However, there are a number of differing opinions on partnership and UNCLOS.

Opposing Views of Partnership

There is significant resistance within Congress against not only UNCLOS, but also any multilateral partnerships. A small but influential group of conservative Senators has ardently blocked the UNCLOS treaty from ratification for some 16 years of "consider-

ation" on the issue.¹⁴ Their rationale asserts that accession to UNCLOS forfeits too much U.S. sovereignty and that existing customary international law and a powerful navy already protect national interests.¹⁵ Further arguments claim that UNCLOS will curtail the U.S. Navy's freedom of movement and that the historical precedence of international law preserving the peace in the Arctic need not be altered.¹⁶ Others propose a new regulatory regime, reasoning that UNCLOS founders could not have envisioned the Arctic circumstances we face today. One such proposal is a construct modeled after the Antarctic Treaty that designates the Arctic north of a selected parallel as a wilderness area.¹⁷ Finally, a small subset of conservative Congressmen introduced a bill in 2009 proposing complete withdrawal from the United Nations, effectively ending U.S. participation in a wide variety of multilateral partnerships; the bill is under review in the House Foreign Affairs Committee.¹⁸ Strong opposition to partnership is balanced by those who have durable arguments in favor of this action.

In support of multilateral Arctic partnerships are a number of broad-based and disparate organizations and policies nonetheless unified in support of the issue, and additional support comes from consequential benefits inherent in UNCLOS accession. Overarching is National Security Presidential Directive (NSPD) 66, "Arctic Region Policy," released in 2009. Among the directive's policy statements is a robust admonishment for accession to UNCLOS:

Joining [the UNCLOS treaty] will serve the national security interests . . . secure U.S. sovereign rights over extensive maritime areas . . . promote U.S. interests in the environmental health of the oceans . . . give the United States a seat at the table when the rights that are vital to our interests are debated and interpreted . . . [and] achieve international recognition and legal certainty for our extended continental shelf.¹⁹

Furthermore, NSPD 66 persuasively promotes multinational partnership in the Arctic to address the myriad issues faced in

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the region.²⁰ Likewise, the Department of Defense, as articulated in its 2010 Quadrennial Defense Review, strongly advocates accession to UNCLOS in order “to support cooperative engagement.”²¹ Also among the tenacious supporters of accession are the U.S. Navy, whose leadership stresses that UNCLOS *will protect* patrol rights in the Arctic, and a number of environmental groups who want to advocate on behalf of Arctic fauna and flora.²² In addition, the oil industry lobby representing Chevron, ExxonMobil, and ConocoPhillips asserts that oil and gas exploration cannot reasonably occur without the legal stability afforded in UNCLOS.²³ In a consequential benefit of accession, the extended U.S. continental shelf claims could add 100,000 square miles of undersea territory in the Gulf of Mexico and on the East Coast plus another 200,000 square miles in the Arctic.²⁴ Accession acts to strengthen and extend Arctic jurisdiction, open additional hydrocarbon and mineral resource opportunities, add to the stability of the international Arctic framework, and boost the legal apparatus for curtailing maritime trafficking and piracy.²⁵ The benefits appear to outweigh the costs as the United States is increasingly moving to a position of strategic disadvantage in shaping Arctic region policy outcomes by failing to ratify UNCLOS.²⁶

Analysis of Multinational Moves in the Arctic

International state actors are far outpacing the United States in Arctic presence and preparedness for what the future of the region may hold. The so-called Arctic Five nations of Canada, Denmark (via Greenland), Norway (via Svalbard), Russia, and the United States all have sovereign coastlines in the area.²⁷ The first four of the five nations are making obvious and in some cases aggressive programmatic initiatives in preparation for their exploitation of Arctic opportunities. The promise of vast, predominantly untapped resources and national security concerns is at the heart of these international moves. Infrastructure improvements, fleet expansion, increased military presence, and often conflicting territorial claims dominate the actions of the Arctic Five in extending the protection of perceived national interests, sans the United States, which “has remained largely on the sidelines.”²⁸

Via uncharacteristic political maneuvering, Canada has demonstrated significant



strides in its Arctic preparedness and has asserted its bold national Arctic policy through both rhetoric and action. In reference to claims of sovereignty in the region, Canadian Prime Minister Stephen Harper has frequently declared, “Use it or lose it,” illustrating a new, almost nationalistic fervor that resonates well with the Canadian populace.²⁹ National impetus to support extended continental shelf claims and secure economic interests has resulted in the allocation of \$109 million for Arctic seabed scientific research intended to be complete by 2014.³⁰ Similarly, Canada is expanding the existing deep-water docking port, a project dating to 2009, into a \$100 million naval base on Baffin Island.³¹ Additional allocations include a new \$675 million icebreaker in 2010, establishment of a Canadian Forces winter fighting school in Resolute Bay near the Northwest Passage, and an initiative to build six to eight ice hardened offshore patrol vessels, the first of which will be delivered in 2014.³² Presence and visibility in the Arctic have been bolstered by sponsorship of three major sovereignty exercises annually, including the joint and combined Operation *Nanook*.³³ Incorporating air, land, and maritime forces to demonstrate and exercise operational capability in the Arctic region, the purpose of these exercises is unequivocally “to project Canadian sovereignty in the High Arctic.”³⁴ Canada also

maintains a staunch position on the sovereignty of the Northwest Passage as internal waters, a claim refuted by the United States, which contends these waters are international straits.³⁵ Similarly, Canada asserts overlapping territorial claims with the United States in the Beaufort Sea and the maritime border between Alaska and Yukon, with Russia in conflicting extended continental shelf claims, and with Denmark over Hans Island in the Nares Strait.³⁶ With its fleet of 12 existing icebreakers and the programmed additions noted above; national level emphasis on planning, preparedness, and presence; and the legal basis granted as a signatory to UNCLOS, Canada appears to be well ahead of the United States in its ability to address vital national interests in the Arctic.³⁷

Danish extensions into the realm of Arctic issues track along the major subject areas of sovereignty and security, economic interests, and political activism. Denmark’s precarious tie to being one of the Arctic Five lies in Greenland, historically a colonial possession whose relationship to the parent Denmark has evolved into the present-day status of self rule. Under self rule, Greenland is autonomous in many domestic respects but is still supported by Denmark in the areas of “defense, foreign policy, sovereignty control, and other authority tasks,” providing the parent country broad powers to deal with

Canada has demonstrated significant strides in its Arctic preparedness and has asserted its bold national Arctic policy through both rhetoric and action

Denmark has attempted to become a more influential political player in addressing international Arctic issues and appears to be well on the road toward the ability to deal with vital national interests in the region

Arctic issues.³⁸ Denmark shares competing claims to the hotly contested Lomonosov Ridge with both Canada and Russia, and all three countries believe the ridge is an extension of their continental shelves and is rich in hydrocarbon reserves.³⁹ In an interesting dichotomy, Denmark and Canada are working in a joint scientific venture to map their respective continental shelves despite the perceived encroachment by the Canadians into Danish-claimed Hans Island waters.⁴⁰ In response to sovereignty concerns generated by Canadian and Russian moves and the general increase in Arctic activity, Danish military forces are adapting by reorganizing and combining their Greenland and Faroe Commands into a joint service Arctic Command and creating an Arctic Response Force.⁴¹ While neither of these moves will increase the size of the Danish forces appreciably, they nonetheless demonstrate the emphasis Danes place on the region.⁴² Force basing at both Thule Air Base in northwestern Greenland and Station Nord in extreme northeastern Greenland, combined with \$117 million in military upgrades in country, use of combat aircraft for surveillance and sovereignty missions, and an impressive maritime presence including RDN *Vaedderen*, one of a select few

frigates in the world built to operate in Arctic ice conditions, demonstrates credible Danish resolve and capability to exercise presence in the region.⁴³ Economically, Greenland and surrounding waters promise a resource-rich environment, with 2008 estimates ranking the area as 19th out of 500 of the world's largest potential oil-producing areas. In addition, receding ice is exposing potential mining areas rich in a number of minerals including large diamond reserves.⁴⁴ Leveraging both credible forces and a possible economic boom, Danish international politics has improved the country's standing in the Arctic arena. Through leadership on the Arctic Council, organizing support for and brokering the Ilulissat Declaration, and assuming the lead for the Copenhagen Climate Change Summit, Denmark has attempted to become a more influential political player in addressing international Arctic issues and appears to be well on the road toward the ability to deal with vital national interests in the region.⁴⁵

Norway has capitalized on a concerted national planning and preparation effort driving a number of key successful regional actions in preservation of its High North interests. As the second nation to submit an extended continental shelf claim to the

United Nations Commission on the Limits of the Continental Shelf, it was the first such claim to be recognized and approved.⁴⁶ This development, combined with skillful bilateral Russian engagement resulting in the resolution of a 40-year-old border dispute in the Barents Sea, solidified Norway's impressive Arctic maritime domain in international law.⁴⁷ The country quickly put this success to work by opening up a new oil field in the western Barents Sea ahead of its Russian counterparts.⁴⁸ As articulated in Norway's High North Strategy, a whole-of-government approach characterizes the nation's resolve to "exercise our authority [in the Arctic] in a credible, consistent and predictable way."⁴⁹ With largely successful diplomatic efforts and an ongoing commitment to bilateral and multilateral cooperation, Norway has also strengthened its military presence, demonstrating a northward shift in strategic focus. A large portion of the armed forces, including its modern frigate fleet, jet fighter forces, and the army staff, has been moved north with relocation of the joint headquarters inside the Arctic circle.⁵⁰ Oslo has also committed to buy 48 F-35 fighter aircraft and negotiated the addition of advanced air-to-sea missiles to the purchase.⁵¹ This action clearly demonstrates the nation's stated objectives of enabling "Norway to exercise its sovereign authority and . . . maintain its role in resource management [in the High North]."⁵²

Norway's strategy also underscores programs necessary to further develop the capacity to safeguard Nordic interests; coordinated research programs are in force in both governmental and private sector institutions.⁵³ Anticipating the increase in maritime traffic through Norwegian exclusive economic zone waters and following an aggressive development program, Norway launched an experimental advanced technology satellite to provide high-fidelity regional ship tracking.⁵⁴ The multifaceted and pragmatic approach to Arctic policy issues, combined with advanced planning, strong presence, diplomatic efforts, and rule of law in approved continental shelf extensions, has Norway well positioned to exploit and capitalize on opportunities in the Arctic.

With the largest swath of Arctic territory in the world, state policy and action have garnered Russia the reputation of "the most determined and assertive player in the [region]."⁵⁵ Economic interests, infrastructure and transportation means, and a formidable

USCGC *Alder* transits iceberg field above Arctic Circle during Operation *Nanook*



U.S. Coast Guard (George Degener)

military presence illustrate the advanced state of Russian preparedness for Arctic opportunities. Both major policy documents, the *National Security Strategy of the Russian Federation until 2020* (published May 2009) and the *Fundamentals of State Policy of the Russian Federation in the Arctic in the Period up to 2020 and Beyond* (adopted September 2008) strongly articulate the critical importance of the region as its “top strategic resource base.”⁵⁶ This stance appears well founded, as one-fifth of the country’s gross domestic product and exports totaling 22 percent are generated in the Arctic. Similarly, estimates of up to 90 percent of Russia’s oil and gas reserves are in the Arctic region; expansion, exploitation, and protection of these resources are deemed “crucially important for Russia’s further wealth, social and economic development and competitiveness on global markets.”⁵⁷ To gain access to these lucrative riches, Russia was the first to file an extended continental shelf claim in 2001. However, the United Nations Commission on the Limits of the Continental Shelf determined there was insufficient evidence to approve the claim.⁵⁸ As a result, an ambitious research effort including use of the Northern Fleet submarine forces is under way to complete the geographical studies necessary to support the claim. These efforts are to be completed by 2015.⁵⁹

Russia appears to perceive itself as the leading Arctic power with the most to gain, a perception supported by impressive plans and resources.⁶⁰ It operates the largest icebreaker fleet in the world: 20 ships, 7 of which are nuclear powered.⁶¹ Nonetheless, many of these ships are reaching the end of their service lives, which will result in significantly reduced icebreaking capability by 2020.⁶² However, continued investment in new icebreaking technology and partnership with the Russian private sector drove the deployment of new double-acting tankers and cargo vessels. These vessels employ azimuthal pod propulsion with the ability to cruise bow-first in open water for good performance and stern-first in ice conditions using its reinforced ice-breaking aft hull. The newest such vessel was commissioned in 2010, bringing the fleet of the state-owned shipping company, Sovcomflot, up to three, each with a 70,000-ton capacity.⁶³ Additional capability in the form of diesel-electric icebreakers is intended to replace that lost as the Soviet-era nuclear fleet ages.⁶⁴ Maritime fleet upgrades are interwoven with planned infrastructure support in the *Trans-*

port Strategy of the Russian Federation to 2030, which includes upgrades of existing Arctic ports and new development on both Russia’s regional oceans and its inland waterways.⁶⁵ Also key to the transportation strategy are the Northern Sea Route and Northeast Passage, a number of straits in and between the Russian Arctic archipelagos that Moscow claims as sovereign internal waters to be administered according to state regulations. Among these regulations is the requirement for all ships to provide advance notice of passage and apply for guidance through the route; implied here is also the payment of a fee for services rendered, a sea-based toll way of sorts.⁶⁶

In defense and protection of the border and resource areas, Russia continues to bolster military presence and capability in the Arctic. In addition to the Northern Fleet, whose naval military capabilities run the full gamut of surface and subsurface operations, Moscow has created the Federal Security Service Coastal Border Guard.⁶⁷ Additional activities in the border and coastal areas include development of control infrastructure and equipment upgrades for the border guard, implementation of an integrated oceanic monitoring system for surface vessels, and a number of equipment and weapons testing and deployment initiatives.⁶⁸ Many of these initiatives demonstrate presence and resolve, such as the 2007 launch of cruise missiles over the Arctic, additional Northern Fleet exercises in 2008, and the resumption of Arctic aerial and surface patrols not seen since the end of the Cold War.⁶⁹ While many of these actions may appear provocative, Russia has also asserted its commitment to working within the framework of international law, participated actively in the Arctic Council and other international bodies, and expressed interest in partnership in the region, particularly in the area of SAR.⁷⁰ In the aggregate, Russia emerges as among the most prepared of Arctic nations for the opportunities available and may well be poised to gain early regional commercial and military supremacy with the goal of similar successes in the international political arena.⁷¹ Russian commitment to multilateral venues, along with the demonstrated

key to the transportation strategy are the Northern Sea Route and Northeast Passage, a number of straits in and between the Russian Arctic archipelagos that Moscow claims as sovereign internal waters



attitudes of other Arctic nations, presents the opportunity for U.S. partnership in the region.

Opportunities for Partnership

Each of the Arctic Five participates in a number of multilateral political venues and has expressed interest in partnership to address current and emerging regional issues. The Arctic Council, one such venue, was formed in 1996 as a high-level membership forum to engender collaboration and cooperation on issues in the region; it has no legal authority through charter but has functioned well to promote multinational visibility and study on Arctic issues by all the Arctic states and indigenous peoples.⁷² The 2009 report *Arctic Maritime Shipping Assessment*, a combined effort of a council working group from Canada, Finland, and the United States, identified many areas ripe for cooperation, including development of hydrographic data and charting, harmonization of regulatory shipping guidelines, and the critical lack of SAR capability in the region.⁷³ Russia has taken the lead on SAR within the council for developing an international cooperation plan. With the Obama administration’s intent to reset relations with Russia by seeking areas where the two nations can work together, SAR may prove to be a unifying construct beneficial to all the Arctic nations, especially the United States.⁷⁴ Initial groundbreaking work on the issue occurred in December 2009 in

while NATO supports member states and has exercised member militaries in the Arctic areas off Norway, it is a divisive influence when trying to include Russia in an Arctic solution set

Washington, DC, with additional discussions in Moscow the following February under an Arctic Council resolution to develop a SAR agreement. The archetype for a U.S.-Russian effort is thus coming into being.⁷⁵ Regional synchronization of SAR assets would address one of many U.S. critical capability shortfalls; the United States has no Coast Guard bases on the northern coast of Alaska (the closest is 1,000 miles south), and the closest deep-water port is Dutch Harbor, over 800 miles south of the Arctic circle.⁷⁶ Another multilateral collaboration was the Danish-led Ilulissat Initiative, which resulted in the unanimous Ilulissat Declaration. In the declaration, all the Arctic Five nations affirmed that “an extensive legal framework applies to the Arctic Ocean . . . notably, the law of the sea [UNCLOS] provides for important rights and obligations [and] we remain committed to this legal framework. . . . [UNCLOS] provides a solid foundation for responsible management by the five coastal states and other users. We, therefore, see no need to develop a new comprehensive international legal scheme to govern the Arctic Ocean.”⁷⁷

The significance of the declaration is paramount to cooperation in that UNCLOS provides the international rallying point for the Arctic states.⁷⁸ Similarly important, by virtue of the unanimous and strong affirmation of UNCLOS, the declaration effectively

delegitimized the notion to administer the Arctic along the lines of an Antarctic-like treaty preserving the notions of sovereignty and resource exploitation in the region.⁷⁹ With U.S. participation and declaration of support for UNCLOS in these venues, failure to ratify the treaty suggests that U.S. credibility and legitimacy, and hence the ability to build cohesive multilateral partnerships, are appreciably degraded. This conclusion is illustrated in Malaysia’s and Indonesia’s refusal to join the Proliferation Security Initiative using the U.S. refusal to accede to UNCLOS as their main argument.⁸⁰ Accession to the treaty appears to be a key first step to preserving U.S. vital interests in the Arctic and building necessary credibility for regional and global partnerships in the political spectrum. Equally important to political partnerships in the region are those available through military collaboration of the Arctic nations.

There are a number of existing constructs for military partnership, most of which are currently bilateral and trilateral military-to-military ventures among the Arctic states and other interested states. The majority of these constructs are military exercises, such as the joint Canadian-Danish-American Northern Deployment 2009, that promote interoperability and cooperation among participating nations.⁸¹ Others include longstanding mutual defense organizations such as the U.S. and Canadian integration in the North American Aerospace Defense Command, a standard that has been suggested for an overall Arctic collaboration model.⁸² Similarly, the North Atlantic Treaty Organization (NATO) includes among its membership all Arctic states except Russia. While NATO supports member states and has exercised member militaries in the Arctic areas off Norway, it is a divisive influence when trying to include Russia in an Arctic solution set.⁸³ Ad hoc arrangements also promote cooperation as in the 2010 agreement between Norway and the United States solidifying a plan for the two national navies to train together in the northern Norwegian waters.⁸⁴ Another ad hoc relationship is also forming among the Scandinavian countries seeking to “enhance security in the Arctic.”⁸⁵ The North Atlantic and North Pacific Coast Guard Forums are multilateral organizations that promote information sharing and cooperative efforts in a number of maritime issues including SAR. These forums have been generally successful in promoting maritime cooperation through information

sharing and interoperability through training exercises and may provide a model for similar cooperation in the Arctic region.⁸⁶ Another program that shows promise for a more broad-based cooperative effort is the U.S. Coast Guard’s “Shiprider” initiative, under which the United States and partner nations exchange maritime law enforcement officials on each other’s patrol vessels, allowing rule of law enforcement in both host and partner nation waters.⁸⁷ To one extent or another, all “Arctic coastal states have indicated a willingness to establish and maintain a military presence in the high north.”⁸⁸ However, decidedly lacking among the Arctic nations’ military forces is a unifying construct to promote cooperation and mutual interests in an all-inclusive multilateral basis. This is similarly reflected in the U.S. military enterprise as there are currently no “mechanisms for joint operations in the Arctic.”⁸⁹ Promoting a new broad-based military partnership paradigm to complement those opportunities available and emerging in the political arena seems to be the next logical step for preservation of the United States’ vital Arctic interests.

The New Arctic Paradigm

Using SAR—a nonthreatening and apolitical issue of interest to all Arctic and other user nations—as the means to open the “partnership door,” the United States, in coordination with Russia, should develop the Multinational Arctic Task Force (MNATF). Foundational support for development of the organization will be facilitated through a joint U.S.- and Russia-sponsored multinational SAR exercise involving all the Arctic nations, notionally entitled Operation *Arctic Light* (OAL). Through the planning and execution of OAL, Arctic nations will build trust, exchange ideas, build relationships, and see and experience the benefits of collaboration. The natural progression over time can be shaped toward formalizing the exercise into an overarching coordination organization that perpetuates OAL, along the lines of the North Atlantic and North Pacific Coast Guard Forums, which evolves into the desired MNATF construct. MNATF would initially be comprised of the military representatives of the Arctic Five plus the additionally recognized Arctic nations of Iceland, Sweden, and Finland. The mandate of the organization would be the regional coordination, synchronization, and combination of member countries’ SAR activities, resources, and

Medical supplies for Alaskans in remote villages are loaded aboard Alaska Air National Guard C-130 during Operation Arctic Care 2011



U.S. Air Force (Brent Campbell)

the United States has lagged dangerously behind other nations in these preparations and is at a strategic crossroads if it wants to influence and shape the Arctic for its benefit

capabilities to meet the needs of the region. The initial operational capability concept is a regional SAR organization that leverages the contributions of each member country into a synergistic operational command capable of responding rapidly to SAR crises in the Arctic region. Building on a model similar to the “Shiprider” program, MNATF may expand mission sets commensurate with perceived regional needs and the desires of member nations to include rule of law enforcement on the high seas, resource protection, and anti-piracy/antiterrorism. The outgrowth of this construct will be the improved safety, security, and stability of the region to the benefit of not only member nations, but also the world at large. Corollary benefits of this new Arctic paradigm will include the partnerships formed and cooperation of nations through information sharing and capability integration. Finally, for the United States, MNATF effectively fills a critical capability gap, adds credible action to the NSPD 66 *Arctic Region Policy* directives, and supports the preservation of U.S. vital interests in the Arctic region.

Recommendations

Global climate change is a reality that offers opportunities in the Arctic for those nations prepared to capitalize on them. Many nations have moved forward with significant programmatic initiatives designed to extend sovereignty, expand resource and infrastructure bases, and build cooperative relationships in order to preserve and protect their perceived national interests in the region. The United States has lagged dangerously behind other nations in these preparations and is at a strategic crossroads if it wants to influence and shape the Arctic for its benefit. Vital to these preparations is for the United States to exercise a more active and leading role in Arctic policy shaping and to demonstrate credibility to act within the international legal system. To this end, the United States must:

- Ratify and put into full force the UNCLOS Treaty. This is a key first step to provide the international legal baseline and credibility for further U.S. actions in the region. While not *essential* to partnership,

accession nonetheless demonstrates U.S. willingness to operate in a cooperative rather than a unilateral manner within the international arena. Through UNCLOS, the United States will gain international recognition of exclusive rights over an additional 300,000 square miles of undersea territory along with the expected potential for lucrative hydrocarbon and mineral resources therein. Accession will also secure the United States a strong position to shape and influence the region for the preservation of its vital interests.

- In collaboration with Russia, develop and execute the regional SAR exercise Operation *Arctic Light* inclusive of all the Arctic nations. OAL will be a unifying catalyst among the Arctic nations promoting trust, cooperation, and mutual understanding, and it will demonstrate the inherent benefits of capability synchronization. The attendant organizational structure necessary to plan and propagate the exercise will provide the roadmap and foundational impetus for further regional partnership, solidifying the gains hereto achieved.

- Using SAR as the unifying point and building on existing multinational venues, lead the formalization of regional partnership into the Multinational Arctic Task Force. MNATF will be a cohesive and enduring organization that unites the Arctic nations’ military forces and will complement political collaborations. MNATF mission sets will expand from SAR to meet the emerging needs of safety and security at the northernmost reaches of the planet. Ultimately, the United States in particular and the world at large will benefit from a stable and secure Arctic region.

The United States must become more involved in the preparation for an ice-free Arctic and in the leadership of the region’s issues. The issues in this area are as expansive as its geography and require multilateral solutions to multinational problems. The recommendations mentioned herein are a foundational starting point for the United States to once again assert its historical leadership role during times of great change and in issues of great importance. The opportunity is presented; will the Nation answer the call? **JFQ**

NOTES

¹ Ronald O’Rourke, *Changes in the Arctic: Background and Issues for Congress* (Washington, DC: Congressional Research Service, March 20, 2010), 6–7.

² Heather Conley and Jamie Kraut, *U.S. Strategic Interests in the Arctic: An Assessment of Current Challenges and New Opportunities for Cooperation* (Washington, DC: Center for Strategic and International Studies, April 2010), 26.

³ O’Rourke, 38.

⁴ Conley and Kraut, 2.

⁵ U.S. Geological Survey Fact Sheet 2008–3049, “Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle,” 1, 4, available at <<http://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf>>.

⁶ Oleg Nekhai, “Russians Take Arctic Sea Route,” *Alaska Dispatch*, August 20, 2010, available at <<http://alaskadispatch.com/dispatches/arctic/6607-russians-take-arctic-sea-route>>.

⁷ Lance M. Bacon, “Ice Breaker,” *Armed Forces Journal* 147 (March 2010), 19.

⁸ O’Rourke, 30–31.

⁹ Mark Thiessen, “CG Admiral Asks for Arctic Resources,” *Navy Times*, October 18, 2010, available at <www.navytimes.com/news/2010/10/ap-coast-guard-colvin-alaska-101810/>.

¹⁰ O’Rourke, 30–31.

¹¹ Committee on the Assessment of U.S. Coast Guard Polar Icebreaker Roles and Future Needs, Transportation Research Board Report, *Polar Icebreakers in a Changing World: An Assessment of U.S. Needs* (Washington, DC: National Academies Press, 2007), 1.

¹² Charles K. Ebinger and Evie Zambetakis, “The Geopolitics of Arctic Melt,” *International Affairs* 85, no. 6 (2009), 1220.

¹³ Ibid.

¹⁴ Yuri Morozov, *The Arctic: The Next “Hot Spot” of International Relations or a Region of Cooperation?* (New York: Carnegie Council, December 16, 2009), available at <www.cceia.org/resources/articles_papers_reports/0039.html>.

¹⁵ Scott G. Borgerson, “Arctic Meltdown: The Economic and Security Implications of Global Warming,” *Foreign Affairs* 87, no. 2 (March 1, 2008), 63.

¹⁶ Ebinger and Zambetakis, 1224.

¹⁷ O’Rourke, 7.

¹⁸ H.R. 1146, “American Sovereignty Restoration Act of 2009,” *Govtrack.us*, February 24, 2009, available at <www.govtrack.us/congress/bills/1146>.

¹⁹ John R. Crook, “Comprehensive New Statement of U.S. Arctic Policy,” *The American Journal of International Law* 103, no. 2 (April 1, 2009), 345. Emphasis added.

²⁰ Ibid., 345–346, 348–349.

²¹ Department of Defense, *Quadrennial Defense Review Report* (Washington, DC: Department of Defense, February 2010), 86.

²² Telis Demos, "Arctic Circle Oil Rush," *Fortune* 156, no. 4 (August 20, 2007), 12.

²³ Ibid.

²⁴ Neil King, Jr., "U.S. Resistance to Sea Treaty Thaws," *The Wall Street Journal*, August 22, 2007, A6.

²⁵ Ebinger and Zambetakis, 1225.

²⁶ Conley and Kraut, 26.

²⁷ Nikolaj Petersen, "The Arctic as a New Arena for Danish Foreign Policy: The Ilulissat Initiative and Its Implications," *Danish Foreign Policy Yearbook 2009* (Copenhagen: Danish Institute for International Studies, 2009), 44.

²⁸ Borgerson, 63.

²⁹ Ibid.

³⁰ Conley and Kraut, 17.

³¹ Ibid., 18.

³² Bacon, 18.

³³ Canadian Ministry of National Defence, "Background: Operation NANOOK 10," July 29, 2010, 1–2, available at <www.canadacom.forces.gc.ca/spec/bg-nanook10-eng.pdf>.

³⁴ Conley and Kraut, 18.

³⁵ Borgerson, 63.

³⁶ Conley and Kraut, 16, 20.

³⁷ United Nations, *Chronological Lists of Ratifications of, Accessions and Successions to the Convention and the Related Agreements as of 05 October 2010* (New York: United Nations, October 5, 2010), available at <www.un.org/Depts/los/reference_files/chronological_lists_of_ratifications.htm>.

³⁸ Petersen, 38. Under self rule, Greenland has the option to become an independent nation, though to date it has not exercised it.

³⁹ Ibid., 44.

⁴⁰ Ibid., 53.

⁴¹ Danish Ministry of Defence, *Danish Defence Agreement 2010–2014* (Copenhagen: Danish Ministry of Defence, June 24, 2009), 12, available at <www.fmn.dk/nyheder/Documents/20090716%20Samlede%20Forligstekst%202010-2014%20inkl%20bilag%20-%20eng.pdf>.

⁴² Ibid.

⁴³ Ibid., 12, 28; Rob Huebert, *Welcome to a New Era of Arctic Security* (Calgary: Canadian Defence and Foreign Affairs Institute, August 2010), 1.

⁴⁴ Conley and Kraut, 20; Peterson, 40; Ebinger and Zambetakis, 1230.

⁴⁵ Peterson, 35; Conley and Kraut, 20. The Ilulissat Initiative was a Danish-led conference of the Arctic 5 at which all countries unanimously affirmed that no additional international frameworks beyond the law of the sea were necessary in the Arctic, effectively eliminating international proposals for a treaty modeled after the Antarctic Treaty of 1959.

⁴⁶ Ebinger and Zambetakis, 1226; United Nations, Commission on the Limits of the Continental Shelf (CLCS) Outer Limits of the Continental Shelf beyond 200 Nautical Miles from the Baselines:

Submissions to the Commission: Submission by the Kingdom of Norway (New York: United Nations, August 20, 2009), available at <www.un.org/Depts/los/clcs_new/submissions_files/submission_nor.htm>.

⁴⁷ Walter Gibbs, "Russia and Norway Reach Accord on Barents Sea," *The New York Times*, April 27, 2010, available at <www.nytimes.com/2010/04/28/world/europe/28norway.html>.

⁴⁸ Ibid.

⁴⁹ Norwegian Ministry of Foreign Affairs, *The Norwegian Government's High North Strategy* (Oslo: Norwegian Ministry of Foreign Affairs, December 2006), 7.

⁵⁰ Conley and Kraut, 23.

⁵¹ Huebert, 1.

⁵² Norwegian Ministry of Foreign Affairs, 5.

⁵³ Ibid., 6, 23–34.

⁵⁴ "Norway's AIS Satellite Enhances Marine Safety," *Maritimejournal.com*, July 22, 2010, available at <www.maritimejournal.com/features/onboard-systems/navigation-and-communication/norways-ais-satellite-enhances-marine-safety>.

⁵⁵ Conley and Kraut, 24.

⁵⁶ Ibid.; Katarzyna Zysk, "Russia's Arctic Strategy Ambitions and Constraints," *Joint Force Quarterly* 57 (2^d Quarter, 2010), 103; Conley and Kraut, 24.

⁵⁷ Zysk, "Russia's Arctic Strategy," 105; Katarzyna Zysk, "Commentary on Russia: Arctic Strategy, September 2008," *Geopolitics in the High North*, June 15, 2009, available at <www.geopoliticsnorth.org/index.php?option=com_content&view=article&id=2&Itemid=71&limitstart=3>.

⁵⁸ Ebinger and Zambetakis, 1226.

⁵⁹ Conley and Kraut, 24; Zysk, "Russia's Arctic Strategy," 106. Completing the geographical studies necessary to support their claim is also articulated as a top national priority in the Russian National Security Strategy.

⁶⁰ Zysk, "Russia's Arctic Strategy," 103–104.

⁶¹ Ebinger and Zambetakis, 1220; Zysk, "Russia's Arctic Strategy," 106.

⁶² Ibid.

⁶³ Caitlyn L. Antrim, "The Next Geographical Pivot: The Russian Arctic in the Twenty-first Century," *Naval War College Review* 63, no. 3 (July 1, 2010), 25.

⁶⁴ Ibid.

⁶⁵ Ibid., 31.

⁶⁶ Zysk, "Russia's Arctic Strategy," 107.

⁶⁷ Antrim, 29.

⁶⁸ Ibid.

⁶⁹ Conley and Kraut, 25.

⁷⁰ Ibid.; O'Rourke, 33.

⁷¹ Conley and Kraut, 25.

⁷² Ebinger and Zambetakis, 1226–1227.

⁷³ Arctic Council, *Arctic Maritime Shipping Assessment*, 2009 Report, April 2009, 5–6, available at <<http://arctic-council.org/filearchive/amsa2009report.pdf>>.

⁷⁴ O'Rourke, 32–33.

⁷⁵ U.S. Department of State, "Arctic Search and Rescue," available at <www.state.gov/g/oes/ocns/opa/arc/c29382.htm>.

⁷⁶ Thiessen; David W. Tittle and Courtney C. St. John, "Arctic Security Considerations and the U.S. Navy's Roadmap for the Arctic," *Naval War College Review* 63, no. 2 (April 1, 2010), 42. Distance calculated using straight line chart plot from Dutch Harbor, AK, to the Arctic Circle boundary line at 66 degrees, 32 minutes north latitude.

⁷⁷ "The Ilulissat Declaration," presented at the Arctic Ocean Conference, Ilulissat, Greenland, May 2008, 1–2, available at <www.oceanlaw.org/downloads/arctic/Ilulissat_Declaration.pdf>. Emphasis added.

⁷⁸ Petersen, 57.

⁷⁹ Ibid.

⁸⁰ King, A6.

⁸¹ Conley and Kraut, 11.

⁸² Borgerson, 63.

⁸³ "NATO Parliamentary Assembly Discusses Alliance Role in High North," *Defense Daily International* 11, no. 9 (May 29, 2009), available at <www.defensedaily.com/publications/ddi/6965.html>; Michael Byers, *Cold Peace: International Cooperation Takes Hold in the Arctic* (New York: Carnegie Council, December 16, 2009), available at <www.carnegiecouncil.org/resources/articles_papers_reports/0040.html>.

⁸⁴ Huebert, 1.

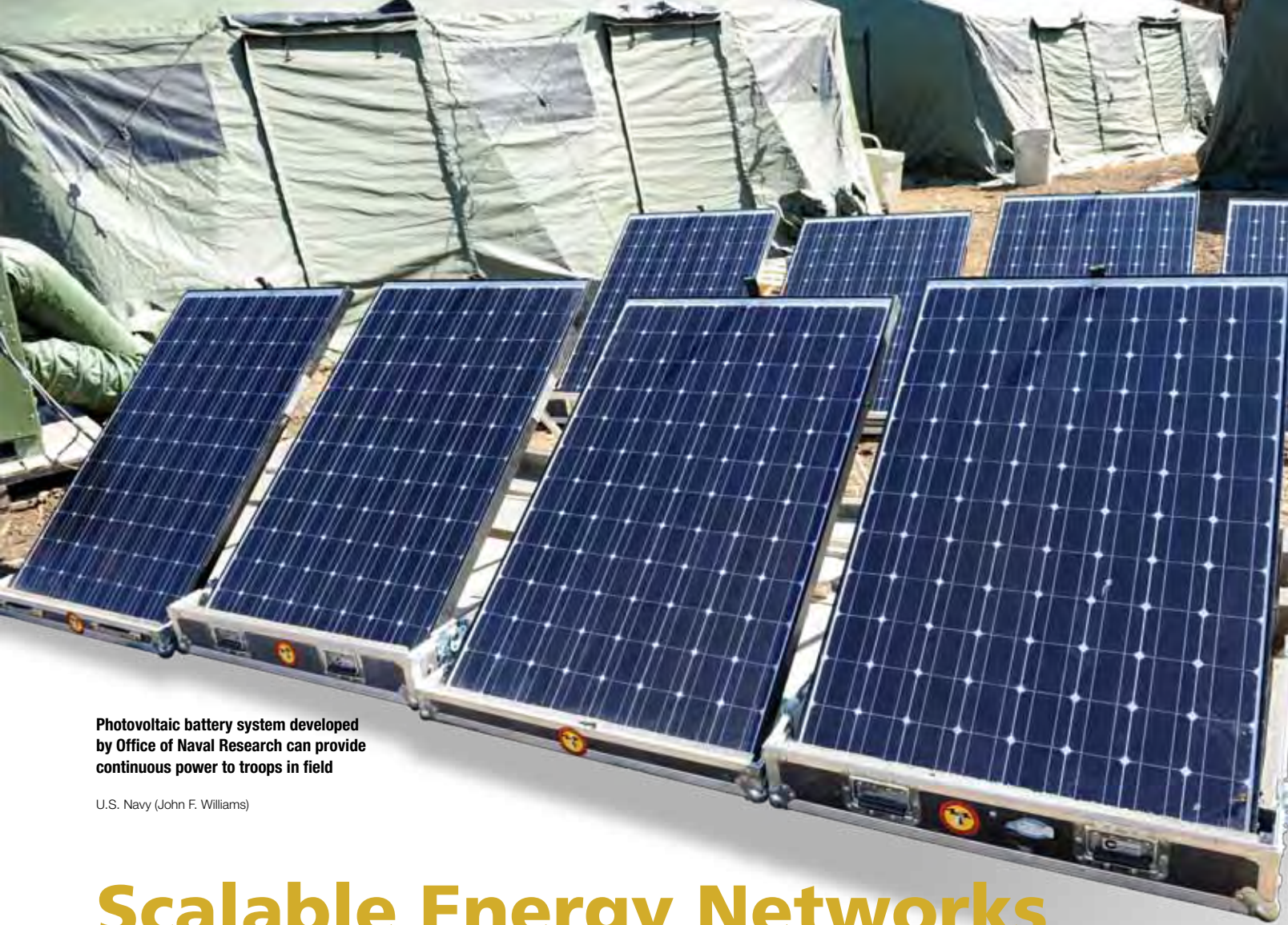
⁸⁵ Morozov.

⁸⁶ Canadian Coast Guard, "North Atlantic Coast Guard Forum," available at <www.ccg-gcc.gc.ca/e0003559>; Canadian Coast Guard, "North Pacific Coast Guard Forum: NPCGF—What Is It?" available at <www.ccg-gcc.gc.ca/e0007869>. The North Atlantic Coast Guard Forum member countries include Belgium, Canada, Denmark, Estonia, Finland, France, Germany, Iceland, Ireland, Latvia, Lithuania, Netherlands, Norway, Poland, Portugal, Russia, Spain, Sweden, United Kingdom, and the United States. The North Pacific Coast Guard Forum member countries are Canada, China, Japan, Korea, Russia, and the United States. Focus areas for both forums include maritime security, maritime domain awareness, search and rescue, illegal drug trafficking, illegal migration, fisheries enforcement, and combined operations. They are forums for dialog and coordination but have no legal or policymaking powers. The cohesive nature of the forums promotes good relations and cooperation among the member nations' coast guard forces.

⁸⁷ Michael P. Attanasio, "The U.S. Coast Guard Maritime Law Enforcement Academy: Standardized Training Brings the U.S. Coast Guard Closer to U.S. and International Partners," *Proceedings of the Maritime Safety and Security Council* 66, no. 1 (Spring 2009), 68.

⁸⁸ O'Rourke, 33.

⁸⁹ Ibid., 38.



Photovoltaic battery system developed by Office of Naval Research can provide continuous power to troops in field

U.S. Navy (John F. Williams)

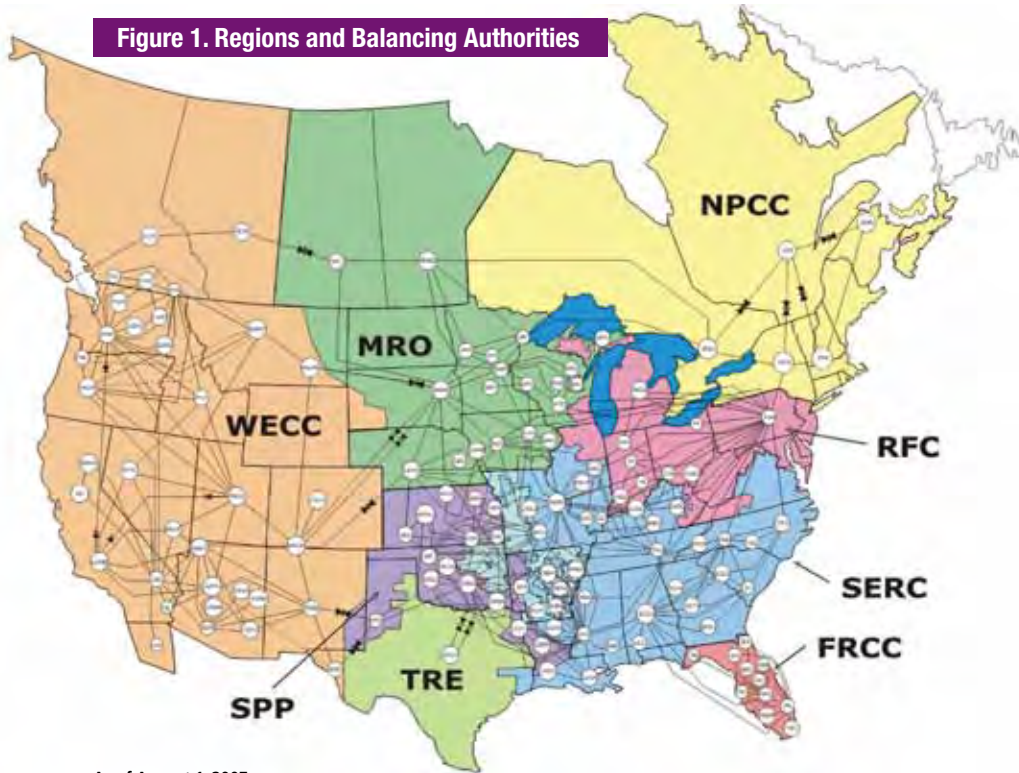
Scalable Energy Networks to Promote Energy Security

By PAUL E. ROEGE

In an age of fluctuating energy prices and environmental concerns, engineers and scientists are locked into a worldwide race to improve energy technologies. Through hard work and investment, these innovators are creating more efficient photovoltaic cells, responsive energy management software, and wireless energy transmission devices. Some of the greatest potential gains, however, remain to be harvested through energy system integration and networking, which ultimately will transform all forms of energy into a fungible commodity. Consider current challenges of converting energy and synchronizing sources with loads—for example, capturing solar energy to provide hot water and heat at night, or supplying transportation fuel. We need a paradigm shift that dissolves existing boundaries and enables us to manage energy seamlessly and interchangeably.

Modern information networks enable data conversion, distribution, and access through flexible hardware/software components that readily integrate into an endless variety of applications. This network approach has evolved rapidly in recent years, and may offer a useful example for energy systems. Two decades ago, only a few imagined the capability to check out a book or rent movies online; today, school children routinely download entire movies onto their telephones with high-resolution screens that are too small for older adults even to watch.

Figure 1. Regions and Balancing Authorities



As of August 1, 2007

Key: FRCC: Florida Reliability Coordinating Council, Inc.; MRO: Midwest Reliability Organization; NPCC: Northeast Power Coordinating Council; RFC: Reliability First Corporation; SERC: SERC Reliability Corporation; SPP: Southwest Power Pool; TRE: Texas Regional Entity; WECC: Western Electricity Coordinating Council

Imagine replacing today's taxonomy of discrete energy components and machines with a pervasive, integrated architecture, akin to modern information systems. Energy would be collected, stored, converted, redistributed, and used in a plug-and-play manner. Transcending even the latest concepts for smart electrical distribution grids or devices, this construct would encompass all forms of energy—electrical, chemical, thermal, or kinetic—enabling seamless conversion and exchange. Such *scalable energy networks* could help mitigate some of our most urgent energy challenges, such as operational instability and vulnerability of the domestic power grid, especially considering the incipient proliferation of dynamic influences such as distributed *micro-generation*¹ (for example, roof-mounted solar panels) and plug-in electric/hybrid vehicles.

The imperative extends to our national security when one considers American Soldiers who defend us by patrolling rugged, remote areas of the world while carrying tens of pounds of batteries;² combat vehicles

with insufficient capability to power onboard systems in an extended silent watch mode; and combat forces diverted to secure resupply convoys, largely delivering water and fuel.³

Historical Context

Energy concepts have evolved over the centuries, but have not achieved a maturity level that provides for the flexible architectures and seamless integration such as those that have transformed information and knowledge. Since the industrial revolution, energy systems such as vehicles, lighting, and manufacturing equipment have reflected a steady progression of performance, efficiency, and reliability improvements, benefitting largely from advancements in materials and manufacturing. Unlike modern notions of information as a ubiquitous and fluid medium, however, we still conceive of energy in terms of basic components:

- sources: oil reservoirs, coal mines, wind, geothermal wells, nuclear fuel
- storage: batteries, fuel tanks, thermal mass, flywheels
- conversion: boilers, generators, compressors, transformers, battery chargers
- distribution: pumps, pipes, switches, cables

some of the most dramatic recent advances in energy performance reflect integration of information and energy

■ applications: lighting, automobiles, personal electronic devices.

With increased public awareness and an apparent inflection point in both the importance of (and global competition for) energy, the time has come to advance holistic and systematic energy concepts, using an analogy of modern information networks.

Some of the most dramatic recent advances in energy performance reflect integration of information and energy—manifested, for example, in digital systems that control modern automobile engines and home heating/air conditioning systems. The North American electrical grid, often termed the world's largest machine, illustrates the challenges inherent in connecting and synchronizing diverse energy sources and loads (see figure 1). Hundreds of utilities coordinate with independent system operators and regional transmission authorities,⁴ using state-of-the-art sensors, modeling, communications, and information-driven control technologies to manage the dynamic balance of electrical power across the continent.⁵ As Eric Lerner and others point out, the expanse, complexity, and dynamic nature of the grid demand extensive systems modeling and control to manage it in a reliable manner, seeking to avoid such contingencies as the massive East Coast power outage of 2003.⁶

Given the challenges of integrating and synchronizing real-time electrical power, it might seem impossible to implement practical energy networks that somehow connect the energy in our automobiles, iPods, furnaces, and bath water. Given the right perspective, however, these complicating factors of time and physics may actually contribute the additional degrees of freedom needed to take that leap. Consider today's flexible, resilient information networks woven with strands of satellite communications, fiber optics, 4G—and even copper wire. These information architectures leverage asynchronicity and diversity through buffers, redundant pathways, and backup storage functions to enable nearly

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seamless access to knowledge and communications upon which we have come to rely.

Network Thinking

In *The Rise of the Network Society*, Manuel Castells describes how the information technology revolution has transformed personal relationships and business processes, and has driven globalization.⁷ We once thought of information as static data—books, file cabinets, and libraries. In contrast, the words *information technology* evoke images of dynamic processes and tools that enhance both capabilities and lifestyles. In the 21st century, a typical American household *needs* cable television, Internet service, cellular telephones—even *smart* appliances. Personal electronic devices have become adaptive tools that not only enable multimedia communications, but also perform any number of other tasks ranging from home shopping to metal detection. With a few keystrokes, consumers can customize their telephones simply by selecting any of the hundreds of thousands of programs or applications available from friends, vendors, or app stores, such as the iPhone Store or Android Market.

In the industrial sector, automotive engineers can now reproduce a classic car using automated information systems to manage the process from end-to-end. A laptop computer running off-the-shelf photogrammetry software uses laser scanners to capture every surface contour and dimension.⁸ Computer-aided design and manufacturing systems, coupled with modern manufacturing equipment, can quickly reproduce the car body with remarkable fidelity. At the customer's option, the design team can produce under-the-hood systems that mimic the original or, alternatively, customize the drive train and suspension for state-of-the-art performance.

Scalable Energy Networks

In the new reality, scalable energy networks will enable energy to be managed safely, efficiently, and interchangeably. Flexible, ad hoc networks will produce, store, convert, prioritize, allocate, and distribute/redistribute energy as needed. Through integrated architectures, industrial and home systems will gradually incorporate more closed cycles—for example, capturing energy from renewable sources (wind, sun) or waste heat (stove, dryer exhaust) and storing it in

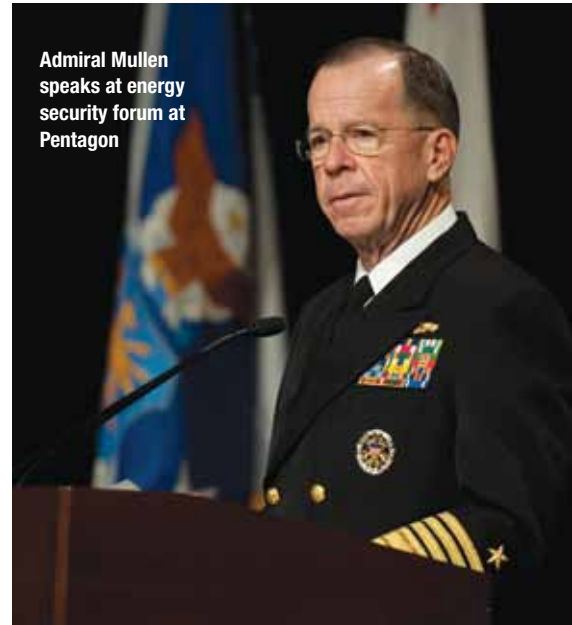
thermal mass (concrete floor) or chemical/electrochemical energy (fuel, batteries).

Intelligent systems will monitor energy flows, anticipate usage patterns, and manage buffers, improving energy use in work tasks, home lives, and leisure activities. Much as we configure preferences and applications on today's personal computers, future work processes will integrate indicators, options, and settings, enabling the energy network to balance parameters such as reliability, speed, and economy—all consistent with our needs. Separate charge indicators, fuel gauges, and thermometers will give way to intuitive, composite icons, accompanied by selection options. To appreciate the nature of this ergonomic shift, one need only contrast the intuitive functionality of today's Web search engines—helpful to the point of annoyance—to the challenge of programming a home thermostat based, at best, upon interpretation of household energy bills.

In a constrained or dynamic situation, the scalable energy network concept could provide a critical edge. Consider, for example, a small Army unit ordered to search a particular neighborhood. The platoon would convoy from its forward operating base, then dismount and patrol the community using various devices, including weapons, sensors, radios, and electronic translators. Such networks might allow vehicles and Soldier-carried devices to be charged at the base camp, drawing power from the local grid, if available. During the movement phase, all systems would share vehicle power, with energy priority allocated to propulsion, sensors, and communications systems. During the subsequent dismounted search, Soldier batteries would continue to charge when within range of a vehicle-mounted wireless energy hotspot, while radars sleep to conserve energy in favor of infrared search devices and translators. By providing interoperability, flexible configuration, and intelligent/transparent energy management schema, the energy network would support critical mission tasks. Energy-sharing and management capabilities would simultaneously enhance performance, reduce operational delays, and improve resource efficiency.

The network concept is not revolutionary in the sense that nearly every machine comprises a combination of energy components such as springs, wheels, batteries, and displays. Yet most Americans see no irony as

Admiral Mullen
speaks at energy
security forum at
Pentagon



U.S. Navy (Chad J. McNeeley)

rail cars ferry coal across America, paralleling but independent of the fuel tanker fleets, power grids, and pipelines that collectively power our country. Moreover, many systems are vulnerable to disruptions in any one of several energy sources. Winter power outages, for example, remind us of the unpleasant truth that a typical oil or gas furnace will not heat the house without power for electrical valves, switches, and fans—no consolation that the car in the garage has a full tank of gasoline and a charged battery. In contrast, by enriching connectivity and increasing liquidity of energy resources, the scalable energy network concept would enable not only more efficient design, but would also replace compound failure modes with increased resilience.

Component Technologies

How might we transform traditionally rigid energy systems architectures into the sort of flexible, resilient, and useful information networks that have essentially flattened the world? As a first step, consider apparent parallels between information and energy system components (see table).

Sources. Networks ultimately require energy captured or extracted from some source, whether coal combustion, nuclear

in a constrained or dynamic situation, the scalable energy network concept could provide a critical edge

fission, wind turbines, photovoltaic panels, or waste heat. Compare this function to data collection through keyboards, microphones, sensors, database searches, and Web crawlers. Scalable energy network designers will stress alignment of source and application characteristics, such as voltage, temperature, or entropy to the respective process interface (for example, mating solar or waste heat sources with domestic water heating).

Storage. We store energy in respective forms and quantities to support applications and to optimize network functions. Just as we configure caches, buffers, and hard drives to archive documents, enrich video displays, and optimize complex calculations, so we use capacitors, batteries, fuel tanks, and thermal mass to start automobiles, maintain building temperatures, and run solar-powered lights at night.

Conversion. Nearly every process involves energy conversion from one form to another. Winding a watch converts motion to spring tension; car engines burn fuel to produce motion. In general, energy conversion accounts for most system efficiency losses. With many of today's thermodynamic processes, such as internal combustion engines, operating at 10 to 30 percent efficiency, and theoretical constraints (depending upon the process) below 50 percent, energy practitioners appropriately are pursuing incremental improvements and alternatives. Considering the room for improvement, success could bring *disruptive* overall process improvements—just as information systems processes have been transformed by conversion process migration from ancient storytelling traditions and primitive painting to electronic processors, Web crawlers, and intelligent speech recognition routines.

Distribution. To be useful, networks must efficiently move and manage energy



Airmen prepare to run fiber optic cables to improve connectivity at Camp Herat, Afghanistan

among collection, storage, and conversion nodes. Maturing information technology concepts have driven a proliferation of transfer technologies, such as portable media, wired and wireless protocols, and management functions integrated into routers and switches. Today's energy distribution technologies remain segregated by the respective media, such as fuel, electricity, and batteries. A scalable network approach might lead to new or improved media-specific technologies, such as free-space transmission (wireless "energy beaming"), as well as development of hybrid systems that would simultaneously manage multiple forms of energy.

Applications. Energy brings the motion, heat, or signal propagation to

vehicles, homes, and radios. While many information applications have become virtually indistinguishable from the tools that we use to conduct business—witness the transparent integration of Internet search, GPS location, and communication functions into a smart phone—energy applications remain relatively discrete. Automobiles, stoves, and lights each embody energy to perform singular functions, although plug-in hybrid vehicles, for example, reflect a trend toward synergistic integration of energy technologies to improve flexibility and efficiency. In this example, the vehicles may someday serve an additional function as distributed energy buffers for the electrical grid. Will we eventually use our "smart Joule" device to draw from the most readily available and inexpensive energy source, selecting among energy "hotspot" providers to warm our hands or power our laptop, or will such a device be unnecessary as the energy network is seamlessly integrated into vehicles, homes, and information systems?

*many information applications
have become virtually
indistinguishable from the tools
that we use to conduct business*

Table. Parallels Between Information and Energy System Components

Function	Information examples	Energy examples
Sources	Observation, printed media, sound, Web sites, databases, sensor/camera, transducer	Motion (induction), piezoelectric, waste/solar heat, photovoltaic, wind, petroleum, nuclear
Storage	Book, optical media (CD/DVD), flash media hard drive	Thermal mass, flywheel inductor, battery, fuel tank
Conversion	Keyboard, scanner, printer, modem, interface card, optical drive	Fire, light, generator, fuel cell, battery charger, motor, compressor
Distribution	Mail, telephone, email, wireless, infrared, 4G, microwave, twisted pair, router, switch	Wire (AC/DC), pipeline, tanker, truck (fuel, batteries), microwave, laser, transformer, breaker, switch
Application	Word processor, online shopping, entertainment, engine controller, computer-aided design, radar	Heating/cooling/lighting, entertainment systems, transportation, power tools, radar

System Integration

Individual technology improvements are necessary but not sufficient to enable scalable energy networks—just as information networks are more than a collection of processors, drives, and routers. Implementation requires construction of holistic models and taxonomies, definition of protocols and standards, and development of fusion concepts.

Holistic Models. Everyone has a different view of energy. For some, the word evokes an image of sustainable resources; others are concerned about power grid vulnerabilities. Many of us consider automobile fuel economy or computer battery life in major purchasing decisions. In order to be useful, a holistic energy model must somehow relate these diverse perspectives, capturing system interactions and collective performance. Lest this seem an impossible task, consider Stanford University's Global Climate and Energy Project, which has published a series of flow charts depicting global energy and carbon flows or "exergy."⁹ These diagrams demonstrate that energy in various forms can be mapped and tracked through conversion and storage processes, further capturing interactions with other systems such as carbon cycles.

Taxonomies. Scalable energy networks would comprise essentially the same components as traditional energy systems. However, the information network example suggests that conversion, distribution, and interfaces increase in importance with network scale, interconnectivity, and dynamic operation. In that context, the information technology community has developed taxonomies, protocols, and stan-

energy applications remain relatively discrete

dards that enable structured and interoperable system design and operation. The Open Systems Interconnection (OSI) model—now captured in International Organization for Standardization/International Electrotechnical Commission Standard 7498-1¹⁰—defines a layered overall taxonomy for information systems.

The Army's "Power and Energy Strategy White Paper," which considers energy implications to various dynamic military situations and complex performance demands, proposes a similarly layered taxonomy (figure 2).¹¹ Although this construct does not directly parallel the OSI model, the taxonomy does transcend component technologies in a similar manner, providing a prospective basis for systems analysis and definition of various protocols.

Protocols and Standards. Energy-related technical standards already exist, having been established by various professional organizations such as the American Petroleum Institute, Institute of Electrical and Electronics Engineers, and National Fire Protection Association. Motorists choose among diesel fuel or gasoline at various octane levels when they refuel, while international travelers encounter differences between customary U.S. (120 volt/60 hertz) power and European (240 volt/50 hertz) standards.

Scalable energy networks would require an expanded suite of interface standards and system protocols to ensure compatibility

Figure 2. Energy Taxonomy

Mission Integration/Energy Informed Operations <ul style="list-style-type: none"> Awareness/understanding – concept of operations, systems analysis Planning tools – mission planning, sustainment planning, support architecture Execution integration – decision aids, measures of effectiveness
Energy/Power/Water Management <ul style="list-style-type: none"> Monitoring/SA – meter, sensors, metric, visualization Power management – manual or automated Demand reduction – control, discipline, recycling
Hardware/Software System Integration <ul style="list-style-type: none"> Shared components Design optimization – synergies, trades Networks/"smartgrids"
Energy Technology <ul style="list-style-type: none"> Storage – tankage, batteries, capacitors Conversion – engines, fuel cells, generators Delivery – pumps, distribution infrastructure, rechargers, pulsed power Use – air conditioners, water production, transportation, computers Delivery – pumps, distribution infrastructure, rechargers, pulsed power
Energy Source <ul style="list-style-type: none"> Logistics fuel Renewables/waste-to-energy Local grid Nuclear

and to facilitate system management. While it may seem difficult to imagine standards relevant to diverse forms of energy, consider the variety of information devices and systems we now routinely connect through a plug-and-play approach, thanks to interface standards (USB 2.0, 801.11 series Wi-fi) and protocols such as Internet Protocol, hypertext transfer protocol, and Domain Name System.

Fusion Concepts. As energy and information technologies evolve, each naturally embraces the other in greater degrees—ultimately, the information and energy networks seem inseparable. Information network components use energy, while intelligent energy systems thrive on information. Faster

Marines provide security for convoy delivering supplies to Forward Operating Base Nalay, Afghanistan

U.S. Marine Corps (Brian A. Lautenslager)



U.S. Navy



Microbial fuel cells, which convert decomposed marine organisms into electrical energy, provide clean, efficient alternative to batteries and fuels

processors needed to improve energy management require more power, increasing the cooling load. In their ultimate manifestation, scalable energy networks will essentially fuse energy and information.

Process Integration

Energy is only useful when it supports real-world needs. To that end, we should examine various energy use cases, seeking effective ways to weave these new capabilities into the work process. Going beyond the basic power meter and preference settings, race car teams have long integrated energy into work processes. Winning NASCAR crews evaluate driving conditions and the competitive situation to inform decisions such as speed and refueling stops.

Process integration does not sprout overnight. Early in the information age, computers were only useful to those who learned to program; early packaged applications had characteristically rigid, logical structures. Batch programs ran from start to finish, and even commercial word processing packages required the operator to insert special codes into the text to accomplish various formatting options, such as bold or underline. Later, object-oriented programming evolved to enable such advanced concepts as drag-and-drop and plug-and-play. Still, users were largely bound to functions and procedures defined by the engineer.

in their ultimate manifestation, scalable energy networks will essentially fuse energy and information

Today, the proliferation of widgets and apps provides a high degree of flexibility to infuse information into our work, social lives, and entertainment pursuits. Who will design tomorrow's energy apps?

Manuel Castells asserts that information network integration has fundamentally changed our world. Without the benefit of special training or grand design, we now configure smart phones that, in turn, reconfigure our human interactions and daily routines. Correspondingly, smart energy systems might influence the ways we juggle cooking, working, and vacationing. We already use basic awareness tools, such as broadcast traffic reports, real-time miles-per-gallon displays, and charge status indicators to inform our commute, driving habits, and the need to recharge telephones. Energy-informed travel management systems would automatically recommend routes, travel time, and speed, based on predicted energy use and fuel prices en route. Future home appliances and heating and cooling systems will optimize temperature settings and timing and select from available energy sources, based on individual preferences and schedules, real-time energy prices, and weather forecast.

Next Steps

Scalable energy networks offer prospects of not only overall energy efficiency improvement but also increased system flexibility, which could be used to reduce vulnerabilities and better balance considerations such as resources and sustainability. To advance the concept, a three-pronged strategy is offered:

- Investigate holistic models at the conceptual level. Academic institutions and think tanks could organize workshops and referee papers, integrating diverse, multidisciplinary views.

- Perform diverse systems analyses. Design and analyze integrated systems for real-world use and explore interactions among various energy and information technologies to expose compatibilities, synergies, critical nodes, and important interface controls.

■ Guide component technology development. System performance will always depend on sound component technologies. Industry and government sponsors should draw on insights from the above analyses as they craft technology investment strategies.

This will be a long-term, iterative process, but the energy stakes are high. Nearly anyone can contribute to energy security, whether as a researcher, leader, voter, communicator, or early technology adopter. **JFQ**

NOTES

¹ Alex Salkever, "Too Green, Too Soon? Renewables Weaken Electrical Grid," *Daily Finance*, April 6, 2010, available at <www.dailyfinance.com/story/too-green-too-soon-renewable-power-may-destabilize-electrical-g/19426714/>.

² *The Modern Warrior's Combat Load: Dis-mounted Operations in Afghanistan (Apr-May 2003)* (Fort Leavenworth, KS: Center for U.S. Army Lessons Learned, 2003).

³ Defense Science Board, "More Fight—Less Fuel": Report of the Defense Science Board Task Force on DOD Energy Strategy (Washington, DC: Department of Defense, February 2008), available at <www.acq.osd.mil/dsb/reports/ADA477619.pdf>.

⁴ See <www.isorto.org/site/c.jhKQIZPBImE/b.2603295/k.BEAD/Home.htm>.

⁵ Department of Homeland Security, Science and Technology Directorate, "National Power Grid Simulation Capability: Needs and Issues," National Power Grid Simulator Workshop, Argonne, IL, December 9–10, 2008, available at <www.anl.gov/esepdfs/PowerGridBrochure.pdf>.

⁶ Eric J. Lerner, "What's wrong with the electric grid?" *The Industrial Physicist* (October/November 2003).

⁷ Manuel Castells, *The Information Age*, vol. 1, *Economy*, 2nd ed. (Malden, MA: Blackwell Publishers, 2000).

⁸ See, for example, <www.menci.com/index.php?page=shop.product_details&category_id=11&flypage=shop>.

⁹ Stanford University Global Climate and Energy Project, "Global Exergy and Carbon Flow Charts," available at <<http://gcep.stanford.edu/research/exergy/flowchart.html>>.

¹⁰ IOS/IEC 7491-1, *Information Systems—Open Systems Interconnection—Basic Reference Model: the basic model* (Geneva: International Standards Organization, 1994).

¹¹ U.S. Army Capabilities Integration Center, "Power and Energy Strategy White Paper" (Fort Monroe, VA: U.S. Army Capabilities Integration Center, 2010).



Do Good Fences Make Good Neighbors? What History Teaches Us About Strategic Barriers

By Brent L. Sterling

Georgetown University Press,
2009

354 pp. \$32.95

ISBN: 978-1-5890-1571-5

Reviewed by

NADER ELHEFNAWY

Do Good Fences Make Good Neighbors? addresses the historical impact of *strategic barriers*, defined here as “continuous or mutually supporting works denying the enemy avenues of attack across a front.” In his introduction, Brent Sterling argues for the relevance of such an appraisal given the renewal of interest in strategic defense around the world (old fashioned walls, as well as more novel missile defenses) and the shallow debate surrounding it, the “dynamic” of which “is for critics and proponents to talk past each other, adding highly subjective versions of the past to bolster their arguments,” with even normally circumspect historians “prone to apply sweeping characterizations on this topic.”

That problem is in all likelihood a byproduct of the paucity of serious research on the subject of fortification in recent years. (An examination of *Parameters*’ index of books reviewed between

1996 and 2010, for instance, shows only one dealing with the topic, *Breaching the Fortress Wall*, a RAND Corporation monograph from 2007 focused on the vulnerability of modern infrastructure to terrorism.) By and large, the available literature examines particular defensive works, conflicts, or periods (for instance, Medieval castles or Civil War forts), or is part of broader histories of wars and warfare (such as John Keegan’s 1992 *A History of Warfare*, which Sterling cites three times in his discussion of basics in his first chapter—a reliance that is telling).

Naturally, serious book-length studies offering cross-cultural comparisons, or dealing specifically with strategic barriers as a class, are even rarer than writing on fortification in general, which is by itself enough to make Sterling’s book worthy of attention. The interest of the book is reinforced by its particular approach to the subject matter, emphasizing the effect of such defenses on the behavior of major actors involved by way of three central questions: first, how the barrier affects “adversary perceptions of the building state’s intent and capability,” and how it shapes their subsequent behavior; second, the effect of the system on the immediate and long-term “military balance”; and finally, the influence of the barrier on the “subsequent outlook, policy debate, and behavior within the organizing state.”

In trying to answer these questions, Sterling opts for in-depth examinations of a half-dozen cases, each a situation in which plausible alternatives to barrier-building existed. Accordingly, he excludes defenses hurriedly thrown up in wartime, or those made unavoidable by the weakness of the building power compared with its adversary (as with the World War II-era

German Gustav Line and Finnish Mannerheim Line, respectively). Making the final cut are ancient Athens’s Long Walls, Hadrian’s Wall in Britain, the Ming Dynasty’s Great Wall, Louis XIV’s Pre Carre, the French Maginot Line, and the Israeli Bar-Lev Line.

Ultimately, Sterling concludes that barriers are neither useless nor a panacea. Properly constructed barriers are frequently effective militarily, imposing costs on hostile penetrations, slowing enemy advances, forcing the attackers to change their behavior in significant ways (such as by seeking ways around the barrier), and offering other uses (such as providing a base for forward operations).

However, barriers are costly to adequately build, maintain, and man, enough so that the builders commonly fail to sustain the required investment over time. Sterling also notes the tendency of the military balance to shift away from the wall-builders over time, as their opponents learn to circumvent or overcome the barriers (a problem that may have worsened with the increasing rapidity of technological change in modern times), while the “deterrence by denial” that the barriers provide must often be backed by “deterrence by punishment” in the case of highly motivated opponents.

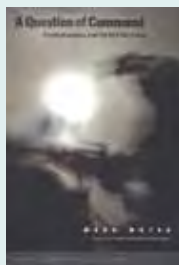
More fundamentally, strategic defenses cannot substitute for a sound strategic orientation toward both allies and opponents, who can be alienated or even antagonized by the barriers. Additionally, such barriers can foster a sense of “subjective” security that reinforces existing tendencies in behavior that may be inappropriate to a given situation, such as excessive risk-taking or the avoidance of deeper solutions to problems that arise (political or military), which also raises the risk of disproportionate demoral-

ization when the sense of invulnerability the barriers provide is punctured by their failure.

Sterling concedes the limits that a single researcher faces in dealing with such a wide range of subject matter in his introduction, and at the same time, the limited diversity of the cases (with four of the six involving European conflicts), but his individual chapters are comprehensive in their treatment of their subjects, running a dense 40 to 50 pages each (counting notes), while offering enough range and depth for a search for historical lessons. Together, along with the concise chapter in which Sterling offers his conclusions, they make for a robust, lucid, and persuasive (as well as accessible) examination of the issue.

It might be protested that the cases Sterling examines bear little relevance for current debates about strategic barriers, which are less concerned with thwarting invading armies than controlling population and material flows (with respect to issues like illegal immigration)—a matter Sterling brings up early on but devotes little space to (and none at all outside of the Roman and Ming cases). However, much of Sterling’s broader analysis (for instance, regarding the changes forced on behavior by a wall’s presence, maintenance costs, and impact on perceptions) is applicable to those matters as well, and readers primarily interested in those issues can also expect to find the book worth their while. *Do Good Fences Make Good Neighbors?* is a solid start to a sounder debate about this important subject and is likely to prove essential reading for students of its subject for years to come. **JFQ**

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**A Question of Command:
Counterinsurgency from the
Civil War to Iraq**

By Mark Moyar

Yale University Press, 2009

301 pp. \$19.80

ISBN: 978-0-300-15276-0

Reviewed by

KIRBY R. DENNIS

Of the many military historians who have examined the art and science of battlefield leadership, few can match the accomplishments of John Keegan, who is perhaps best known for *The Face of Battle* (1976). Keegan's analysis has proven relevant over decades of evolving conflict and remains instructive to this day. In 1988, Keegan produced an equally important analysis of generalship in times of conflict. In *The Mask of Command*, he examines the evolving nature of wartime leadership and posits that a confluence of factors—among them, societal norms and technology—influences the nature of command and ultimately affects the manner in which leaders make decisions. Now, over two decades later, Mark Moyar offers *A Question of Command*, a counterargument to Keegan's analysis of counterinsurgency warfare. Moyar extracts 10 attributes of effective counterinsurgency leadership from a historical analysis of 150 years of conflict, and in doing so, applies what Keegan refers to as the *traits method of analysis*—a notion that universally applied common characteristics can determine success or failure on the frontlines of battle.

The premise behind Moyar's analysis is that counterinsurgency is, above all else, leader-centric warfare. Moyar defines effective leadership through his "ten attributes of effective counterinsurgency leaders"—initiative, flexibility, creativity, judgment, empathy, charisma, sociability, dedication, integrity, and organization—which he highlights in accounts of nine counterinsurgency campaigns. Moyar's analysis covers the full spectrum of counterinsurgency conflict throughout history, which is evident in the equal attention given to the more studied, modern campaigns in Afghanistan and Iraq and the lesser known conflicts of post-Civil War Reconstruction, the Philippine insurrection of 1899, and the Salvadoran insurgency in the early 1980s. Moyar concludes the book with a chapter titled "How to Win," in which he seeks to provide a roadmap for the military to use in its recruitment and development of future leaders.

While noble in its efforts and interesting in its content, the book has limited success in achieving its purpose. Moyar states from the outset that his analysis aims to assist counterinsurgents in the execution of their mission, yet the overall purpose is lost in the intervening pages where he delves into the historical minutiae of each counterinsurgency campaign. Broadly speaking, history is central to any effective analysis of battlefield command, and Moyar acknowledges such in his sweeping account of counterinsurgency warfare. However, this book offers much more history than analysis, which ultimately mutes its bottom line and leaves the reader grasping for clear examples of Moyar's 10 attributes in practice.

Through his description of 18 Civil War officers and their experiences in combat,

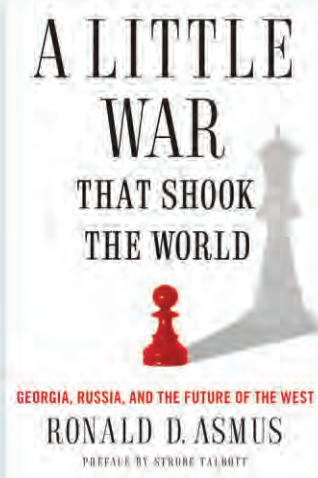
the detailed background of Filipino political personalities and movements in the 1950s, and his rehashing of the all-too-familiar history of the Coalition Provisional Authority in Iraq, Moyar proves that less can often be more. Additionally, the author claims a level of exclusivity for his idea of leader-centric warfare in his opening chapter, and ultimately takes the "gospel" of counterinsurgency doctrine to task. Specifically, Moyar writes that Field Manual (FM) 3-24, *Counterinsurgency*, makes no mention of "empowering quality American or host-nation commanders" and therefore fails to address a central tenet of counterinsurgency warfare. While Moyar may be technically correct in his assertion, it is a stretch to intimate that U.S. Army doctrine does not advocate empowerment at all levels of command. To be sure, FM 3-24 clearly endorses the concept of decentralization in its opening chapter under the principle "Empower the Lowest Levels." More to the point, in the 3 years between the publication of FM 3-24 and Moyar's book, it has become abundantly clear that empowering American and host nation leaders in the execution of counterinsurgency operations is a cornerstone of not only the Nation's strategy, but also the military's education and training programs.

To his credit, Moyar calls to mind the importance of sound leadership at all levels of command, and in doing so, reinforces a bedrock tenet of warfare for the contemporary student. However, this book could be more fittingly described as a history of counterinsurgency conflict rather than the playbook that the author intends. After all, using the Myers-Briggs Type Indicator to select counterinsurgency leaders does not exactly fit a timely purpose—which, in Moyar's own words, is "to assist

counterinsurgents in Iraq . . . [and] in Afghanistan."

If there is one widely acknowledged lesson to emerge from Iraq and Afghanistan, it is that counterinsurgency warfare is difficult. It is an exercise in physical and mental willpower for the leader on the ground, who is required to motivate, think, plan, articulate, learn, and adapt at a constant pace. In the end, though, the ability of a leader to do all of these things is often not enough. David Kilcullen states as much in his book *Counterinsurgency*, where he unearths two historical trends that have often made the difference between victory and defeat. Kilcullen found overwhelming evidence to indicate that, first, fighting in one's own country provides a marked advantage, and second, success in counterinsurgency often depends on a willingness to negotiate with the enemy. Kilcullen's argument is instructive in that it softens Moyar's claim that effective leadership is the most important aspect of defeating an insurgency. To be sure, achieving tactical, operational, and strategic goals in a counterinsurgency campaign requires a host of factors to work in harmony. Among these are effective police forces, a viable host nation government, and, indeed, competent military leaders on the frontlines. In the end, *A Question of Command* is a thoughtful analysis from which we all can learn, but Moyar's notion of leader-centric doctrine addresses only part of the solution to an enormously complex problem, and, therefore, is not the panacea that he claims it to be. **JFQ**

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A Little War that Shook the World: Georgia, Russia, and the Future of the West

By Ronald D. Asmus

Palgrave Macmillan, 2010

272 pp. \$27.00

ISBN: 978-0-2306-1773-5

Reviewed by

JAMES THOMAS SNYDER

Ronald Asmus was recruited to the Bill Clinton administration State Department in 1997 from the RAND Corporation, where his writing on North Atlantic Treaty Organization (NATO) expansion attracted attention. During the next 3 years, he worked to open NATO's door eastward. As Executive Director of the German Marshall Fund of the U.S. office in Brussels until his death in April 2011, Asmus opened discussion on the future scope of the Alliance and European Union (EU) in the Balkans and beyond the Black Sea.

With this book, Asmus offers the first comprehensive political analysis of the August 2008 war between Russia and Georgia, the most serious blow-back against Western power in Europe since the end of the Cold War. This small war caught by surprise nearly everyone not personally involved in trying to avoid it. Like the other guns

of August, the tragedy is that it should have been averted.

Russia prepared meticulously for an opportunity to crush Georgia and its Western aspirations. Georgian President Mikhail Saakashvili had been well warned not to pick a fight with the Russians. While not falling into a trap—Asmus assiduously defends Saakashvili and his decisions—the president nonetheless sent his small and ill-prepared forces into the maw once the decision was made to preempt Russian forces massing near Tskhinvali. Asmus argues that Saakashvili believed there was really no choice. He could go on the attack with the advantage of surprise, or wait to be crushed by invasion.

But Georgia had virtually no air force and only five mechanized brigades—one a training brigade, one deployed to Iraq, and all prepared for counterinsurgency rather than armored warfare. They faced a joint force of the well-equipped 58th Army, elements of the Black Sea Fleet, and forward-deployed bombers and attack aircraft. Most of these forces had just finished a major exercise preparing for precisely the scenario they faced on August 9.

With the Georgian offensive, Russian forces attacked along two fronts in Abkhazia and South Ossetia. Only the latter was contested by Georgian forces, Asmus notes, providing evidence of premeditation. Russian naval units landed marines at Ochamchira in Abkhazia and bombers attacked targets across the country, flying 400 sorties in 5 days, including 120 sorties on August 9 alone.

The Russians have been critical of their own performance, particularly given their overwhelming superiority. Georgia claimed 17 shootdowns, including a Backfire bomber. Russian armored and mechanized units

faced constant breakdowns and could not coordinate with their air forces.

But nothing effectively prevented Russian forces from dismembering the country and taking Tbilisi. Georgian defensive lines were broken in 2 days, and the leadership was in disarray. Only the rapid and extraordinary political pressure brought to bear by the EU, led by the irrepressible French President Nicholas Sarkozy, appears to have held Russia back.

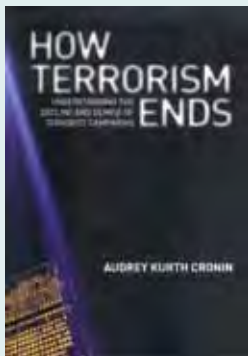
Not enough credit is given to the French president, or to the EU, for the effort to end the war. Without coercive power at their disposal, it was a dramatic feat of diplomacy. But Asmus is right about the consequences of the EU's lack of leverage: Sarkozy's prime imperative to end the conflict drove a diplomatic settlement that heavily favored Moscow. The six-point agreement was left vague enough to put the region's most intractable cold conflict in deep freeze.

Everyone lost this war, Asmus argues, the West included. That probably overstates the case. Georgia clearly lost, with its territory annexed, its military destroyed, and no strong advocate to move westward. Russia won only through massive advantage and was punished by isolation for its aggression. The war led to enormous capital flight, and following a collapse in oil prices, Moscow discovered that its newfound power was largely ethereal.

Traditional friends, mostly border states, were deeply alarmed by Russia's action against its neighbor. NATO, the EU, and the Organization for Security and Co-operation in Europe all condemned Russia and sided with Georgia. Moscow learned the hard way that real power only comes through relationships, and its new position as pariah stung.

Russian aspirations are a reality of the new century, but so are those of Georgia. NATO and the EU are also fixed realities with which Russia must contend. Its recent rapprochement—signing the New Strategic Arms Reduction Treaty, commemorating the Katyn Forest massacre, and marking Victory in Europe Day with allied troops marching for the first time in Moscow—may be the first steps toward reconciling these essential truths. **JFQ**

James Thomas Snyder served on the International Staff at North Atlantic Treaty Organization Headquarters in Brussels from 2005 to 2011.



**How Terrorism Ends:
Understanding the Decline and
Demise of Terrorist Campaigns**

By Audrey Kurth Cronin

Princeton University Press, 2009

330 pp. \$29.95

ISBN: 978-06911-394-87

Reviewed by
ERIC SHIBUYA

Audrey Kurth Cronin has produced a work that is both insightful and frustrating—but it is frustrating for all the right reasons. Readers searching for definitive answers for the end of terrorism will be disappointed. So, too, will critics expecting a presentation of how “simple” it is to end terrorism. What readers will find is a book written conditionally and with much argument by counterfact, but active readers will find a rich source for debate. More critically, it is the right debate to have regarding terrorism and its threat today: namely, how will it end? One of the most effective themes throughout the book is that despite all of the contemporary hyperbole, historical experience shows that terrorist movements generally do not last long, and at some point in time, practically all of them come to an end. How that end is achieved—whether it is done by or at the expense of the state—and what lessons states today can take from past experiences are the major themes of this book.

The introduction serves as an effective executive summary

of the argument and insights of the entire book. Successive chapters detail the six potential avenues for the demise of a terrorist movement: decapitation (leader/leaders are killed or captured), negotiation, success (movement’s aims are achieved), failure, repression, and reorientation (group/movement shifts from terrorist violence to something else). These avenues are developed from an analysis of over 400 terrorist groups (a description of the dataset and more detail from the statistical analysis are given in an appendix). Each chapter then presents a few cases as illustration of how the particular avenue ends (or does not end) the terrorist movement in question. The cases are selected for variance in terms of leadership, goals, and other factors. A seventh chapter applies the various frameworks to al Qaeda, putting forward an initial analysis on that group’s possible end, and a short conclusion closes out the text.

While some may view the conclusions from the data as basic, Cronin’s analysis brings them into stark relief, especially considering shortcomings in U.S. counterterrorism policy to apply such “conventional wisdom.” Some of the findings include the point that the arrest and discrediting of a terrorist leader are generally more effective than assassination as a decapitation technique. Negotiation may not be possible with core members of an organization, but may have value in creating factions within the group. More importantly, the historical record shows that negotiations are not linear, that setbacks will inevitably occur, and that the most successful negotiations occur with terrorist organizations with clearly articulated goals. The findings are important, but a deeper insight may be the underlying point that terrorism is most effective when

governments overreact. In other words, the question may not be how terrorism succeeds, but how governments fail.

The chapter devoted to the end of a terrorist movement due to its success is perhaps the weakest of those presented (the cases are Irgun in Israel and Umkhonto in South Africa). Much of Cronin’s own analysis suggests these causes are won *despite* the use of terrorist violence (and indeed, such violence may have been counterproductive to achieving the goal). Regarding the “success” of establishing the state of Israel, Cronin notes that Irgun chooses to lay down its arms rather than engage in a civil war in Israel (p. 247, note 43, which also points out that this decision coincided with the sinking of a ship carrying arms for Irgun). The goal of an independent Israel was certainly achieved, but Irgun’s contribution to that goal could be contested. Its role could be considered akin to that of a spectator at a sporting event trying to distract the opposition. Can those actions really be connected to “victory”? More importantly, Cronin’s argument regarding the role of terrorist violence in achieving a particular goal does not mention the possibility of the terrorist organization’s value as the “greater evil.” Terrorist violence may be counterproductive politically, but it may also move a government to negotiate with a more moderate entity sharing the goals of the terrorist group. Terrorist violence may not “win” in and of itself, but it may make some compromise more palatable to a government.

Another point for debate lies in the application of the various approaches to al Qaeda. Cronin suggests the various ways al Qaeda may be unique (considering most of them as matters of degree rather than type), and a reader can take issue with some of the conclusions drawn. For

example, Cronin points out al Qaeda’s “resilient structure” but later suggests that its methods of recruitment and forms of communication move it further away from being an organization and closer to a larger social movement with various like-minded affiliates. If the latter is the case, then is it even valuable to discuss a structure to al Qaeda? Cronin herself seems to note this, suggesting “the debate over the size, structure, and membership of al Qaeda is a quaint relic of the twentieth century” (p. 176).

Cronin’s argument illuminates more than it obscures but still touches on only part of the problem. Ultimately, the reasons for the end of terrorism, despite the categorizations offered here, are almost as varied as the reasons given for the causes of terrorism. While Cronin correctly recognizes that focusing on single groups or only the current phenomenon is ahistorical and misses valuable potential lessons, the reasons and factors for the end of terrorism are too broad to be valuable in and of themselves. The preoccupation with an ongoing terrorist organization misses valuable precedents, while simply noting “factors” of terrorism’s demise is too vague. The value is in the synthesis of these approaches: “The lessons of the past must be considered, comprehended, and then carefully calibrated for the particular circumstances and the particular strategy of a particular group, directing its energies at the vulnerabilities of a particular kind of state” (p. 206). Alliteration and repetition notwithstanding, the combination of deep knowledge of a specific group with a broader conceptual framework of the overall phenomenon is the way to greater understanding. **JFQ**

Eric Shibuya is Associate Professor of Strategic Studies at the Command and Staff College, Marine Corps University.



Airman secures base flightline in Southwest Asia

U.S. Air Force (Scott T. Sturkol)

Securing Aerial Approaches to Joint Airfield

By ROBERT B. HOLDSWORTH

The national security of the United States relies on the ability to project airpower around the globe. The 2011 National Military Strategy articulates key capabilities of airpower crucial to securing U.S. national interests: the direct employment of globally integrated command and control, intelligence, surveillance, reconnaissance, and aerial strike capabilities, as well as the use of strategic and tactical airlift assets to effectuate rapid global mobility for joint forces in order to protect and advance national interests on the ground worldwide. America's airpower capabilities are unmatched; however, low-cost weapons systems with the potential to blunt U.S. aerial strike and power projection advantages have proliferated extensively among state and non-state adversaries, threatening approach and departure corridors for these key assets.

While the Services and Joint Staff have invested significant doctrine, organization, training, materiel, leadership, education, personnel, facilities, and policy resources to secure aircraft carriers and airfields against

penetrating and indirect fire attacks, the lack of clear joint guidance regarding responsibilities for securing aerial approach and departure corridors creates a vulnerable seam for which no single Service or functional component has clear accountability. This seam in joint doctrine could be mitigated by revising the Air Base Defense Considerations section in Joint Publication (JP) 3-10, *Joint Security Operations in Theater*.¹ This revision should emphasize the importance of securing aircraft approach and departure corridors and defining responsibilities as a joint force priority on par with the specific direction provided for defense of approaches to seaports found in JP 3-10's Seaport Facility Defense Considerations section.

The Government Accountability Office has estimated that 5,000 to 7,000

man-portable surface-to-air missiles (SAMs) circulate outside of state control and that "tens of thousands more missiles are stored in government arsenals with questionable stockpile security."² Furthermore, the Congressional Research Service has reported an unclassified list of 26 separate nonstate rebel, militant, and/or terrorist groups possessing SAMs.³ U.S. military aircraft have employed onboard countermeasures and modified flight procedures to defeat this threat, but unclassified reports describe dozens of incidents of successful insurgent ground-fire attacks on U.S. aircraft since 2001. These successful attacks have included SAM strikes against Air Force C-5 and C-17 cargo aircraft in 2003 and 2004, respectively, and against nine Army helicopters between October 2003 and January 2004.⁴

the lack of clear joint guidance regarding responsibilities for securing aerial approach and departure corridors creates a vulnerable seam

The need for these low-density/high-demand aviation assets to remain available for response across multiple theaters magnifies the importance of defeating these threats to U.S. aerial might. Additionally, hazards to the Nation's airpower capabilities are exacerbated by "increased budget pressures" and prolonged acquisition lead times associated with replacing lost aircraft.⁵ The speculation surrounding China's procurement of F-117 stealth fighter wreckage from Serbian farmers after the downing of a Nighthawk in 1999, and the subsequent demonstration of their own J-20 stealth fighter in January 2011, provides additional reinforcement for the need to provide insurance against combat losses in order to "continue to maintain our margin of technological superiority."⁶ Straightforward joint guidance and careful attention from planners in tasking are required to emphasize the strategic nature of airfields and their approaches.

The current lack of clear joint guidance regarding Service and/or component responsibilities for the defeat of SAM threats to joint airfield approach and departure corridors increases the importance of Service doctrine in mitigating this threat. Unfortunately, a review of Service doctrine reveals no definitive answer to the question of responsibility for security of aerial approaches for even single Service-owned/component-owned and -operated airfields.

Current Doctrine

The Department of the Navy published Marine Corps Warfighting Publication (MCWP) 3-21.1, *Aviation Ground Support*, which identifies Marine Corps Military Police (MP) assigned to the Aviation Combat Element (ACE) Marine Wing Support Squadron as having the primary responsibility for organizing and training Marines for airbase ground defense duties in flightline security, control of access to aircraft in restricted areas, and so forth. Since this publication is published by the Navy, which does not normally conduct single-Service operations in contested land areas, we can assume that MCWP 3-21.1 is the authoritative guidance for defense of Navy as well as Marine aircraft operating from land-based airfields.

Lieutenant Colonel Robert B. Holdsworth, USAF/ANG, is Commander of the 123^d Security Forces Squadron, 123^d Mission Support Group, 123^d Airlift Wing, Kentucky Air National Guard.

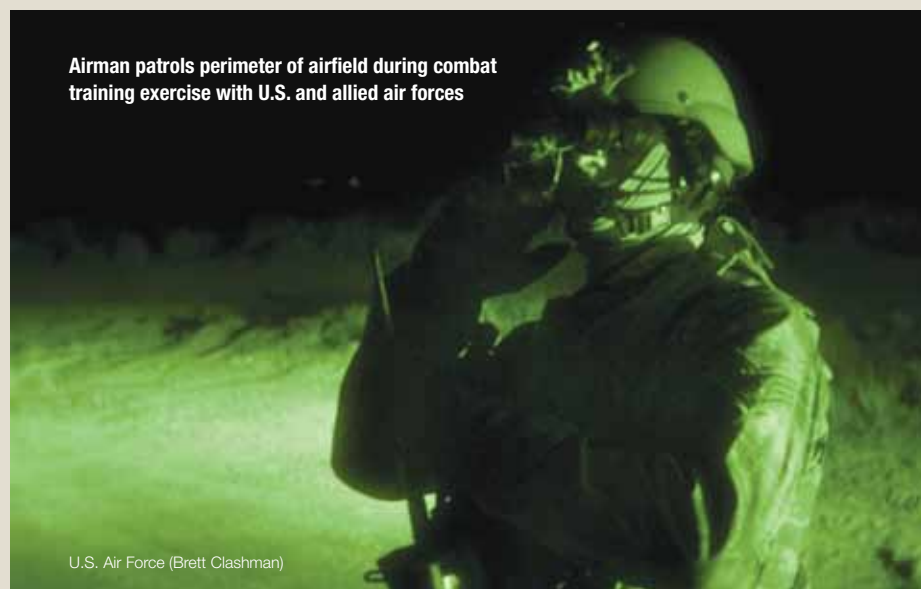
the current lack of clear joint guidance regarding Service and/or component responsibilities for the defeat of SAM threats increases the importance of Service doctrine in mitigating this threat

This publication identifies the ACE commander as retaining responsibility for area security once air operations have moved from aircraft carriers to land-based airfields. It specifically tasks aviation units with organizing active defense measures based on threats to operations including equipping support and augmentation Marines with weapons and ammunition, conducting security patrols, using aerial reconnaissance, integrating close air and fire support, and tasking Marine Air Ground Task Force Ground Combat Element (GCE) units as an emergency last resort to defend Marine airbases. Though arming ACE Marines to conduct threat-based patrols and employing GCE Marines in emergency situations could be inferred as measures to address a SAM threat to Marine and/or Navy aviation operations, MCWP 3-21.1 provides no specific guidance with regard to mitigating SAM threats to aerial approach and departure corridors. The publication also references the obsolete JP 3-10.1, *Joint Tactics, Techniques, and Procedures for Base Defense* (July 23, 1996), an indication that MCWP 3-21.1 has not been updated recently in light of even the scant guidance to be found in the most current version of JP 3-10, published February 3, 2010.

Army doctrine tasks the MP corps to serve as its functional component responsible for the defense of airfields as a subset of its

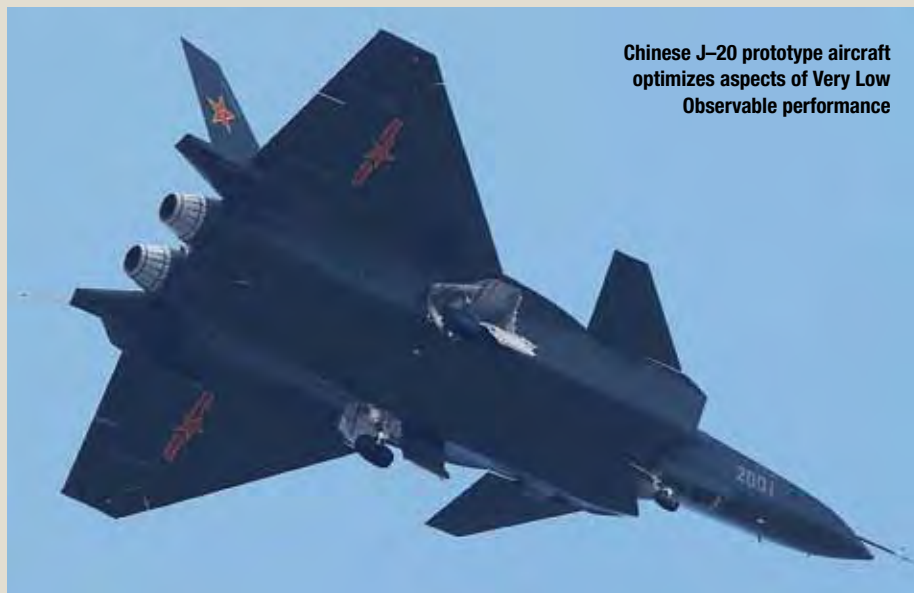
MP corps' area security responsibilities to protect critical assets and sites.⁷ Field Manual (FM) 3-39, *Military Police Operations*, asserts that "airbase protection and defense is a key component of MP [area security] operations . . . when the threat exceeds the airbase capabilities." The manual goes on to establish that another MP mission, route security, includes the establishment of a movement corridor that "would typically include the airspace above it to allow the establishing unit to conduct aerial reconnaissance and fires." While not specifically identified with defeating SAM threats, these two MP missions could be combined via joint coordination to develop a procedure whereby Army MP forces are used to secure airfield approach and departure corridors. This potentiality could hardly be inferred and would require extensive justification and coordination by Joint Force Air Component Commander (JFACC) staff members to ensure the Joint Force Land Component Commander (JFLCC) Provost Marshal's and/or Joint Security Coordinator's staff tasked it appropriately and provided the requisite oversight to ensure the approach and departure corridor security mission was not subsumed by the MP corps' numerous other mission sets and competing JFLCC priorities.

Air Force guidance for mitigating the SAM threat to airfield approaches is found in



Airman patrols perimeter of airfield during combat training exercise with U.S. and allied air forces

U.S. Air Force (Brett Clashman)



Chinese J-20 prototype aircraft optimizes aspects of Very Low Observable performance

Air Force Instruction (AFI) 31-101, *Integrated Defense*, which directs that “commanders must coordinate necessary security operations support within the Base Security Zone (BSZ) . . . by coordinating via their operational chain of command with the appropriate base cluster commander, area commander, or command authority/host nation responsible for ground forces operating within the BSZ.” This instruction implements in Air Force doctrine the aforementioned air base defense guidance from JP 3-10 and introduces the Air Force-specific term *base security zone* for use in describing what JP 3-10 articulates as the “base boundary.” AFI 31-101 goes on to instruct Air Force planners to “support the establishment and adjustment of the [joint] base boundary . . . to include the area from which a threat can launch an attack against . . . aircraft approaching/departing the base.” Essentially, Air Force doctrine seeks either to request extension of the joint base boundary (secured by another component’s/Service’s base defense force) out to the edge of the SAM footprint or to mandate that Air Force commanders identify this threat area when requesting support from joint security area (JSA) commanders outside the base boundary. Unfortunately, the document offers no recommended solution as to how to secure the area if forces are not made available from either another Service or the host nation.

Shortfalls

Current joint doctrine does little to address the seams in Service guidance regarding responsibility for securing

approach and departure corridors against SAM threats. JP 3-10 articulates the fact that aircraft are “especially vulnerable when operating in the ‘low and slow’ take-off and landing flight regimes” and that “approach and departure corridors . . . are critically important and a challenging joint force security consideration.” The publication goes on to pronounce that the airspace above JSAs is not normally included therein, but is governed by procedures in JP 3-52, *Joint Airspace Control*. However, JP 3-52 states that the “JFACC may have to orchestrate special procedures (ground patrols in vicinity of approach path)” to defend against SAM threats.

JP 3-52 does not address the fact that the JFACC does not normally have dedicated ground forces assigned or attached capable of performing this requirement over the 25 square kilometers out from the joint airfield that “historical experience with irregular threat forces and their use of . . . shoulder-launched [SAMs] gives [as] a planning factor.”⁸ The unaddressed assumption implies that the JFACC must request from the JFLCC that either the Joint Security Coordinator extend what JP 3-10 refers to as the base boundary beyond the immediate perimeter of the base cantonment area to encompass the “footprint” of potential SAM launch sites when hosting JFACC assets, or task the battlespace owners of JSAs outside base boundaries to use their own resources to undertake the actions necessary to meet JFACC security requirements for defense of aircraft approach and departure corridors.

As a practical matter, when allocating missions and resources among the components of the joint force, this staff coordination does not normally rise to the attention of the component commanders or the joint task force commander and is thus left to the cooperative efforts of their respective staffs. This cooperation after establishment of the joint command is then further complicated by the fact that chapter II of JP 3-10 goes on to direct that a “component commander with unique security requirements (for example, those related to the shoulder-launched SAM footprint around a joint operating base) should expect to provide the majority of forces for the defense of those assets/bases.” Since the JFACC does not normally control the JSAs located around the air component’s airfields, a function normally tasked to an Army, Marine Corps, coalition, or host nation battlespace owner (with movement, maneuver, protection and/or sustainment requirements of their own), securing the approach and departure corridors to joint airfields is further challenged. Moreover, the JFACC senior officers on joint bases, often designated as the Senior Airfield Authority (SAA), normally have organic security assets sufficient only for close-in security of the facilities, ramps, taxiways, runways, and so forth located on or immediately adjacent to the joint airfield.⁹

On a joint base, the commander may not necessarily be “dual-hatted” as the SAA, and may have competing priorities and/or limited resources to perform base perimeter security even when the boundary is established well short of the SAM threat’s total footprint. The JFACC SAA is thus dependent upon the JFLCC JSA commanders or base commanders to dedicate limited manpower resources to occupying or patrolling potential SAM launch sites along aircraft approach and departure corridors in support of the JFACC security requirements.

This situation drives the need for enhancing the joint doctrine for air base defense found in JP 3-10 to provide directive guidance that will assist in identifying the SAM threat to aerial approach and departure corridors as a joint force priority (and delineate component responsibilities for addressing it) during the tasking process in order to incorporate these requirements into either the JFACC or JFLCC allocated forces and command and control responsibilities.

A Way Forward

It can be argued that no seam actually exists with regard to securing approach and departure corridors because JP 3–10 mentions that “in support of the JFC’s concept of operations, the JFLCC plans and conducts security operations to ensure protection of US . . . critical assets” and goes on to comment that the “JFLCC will normally assign an Army maneuver enhancement brigade [MEB] for security of defined geographic areas.” The MEB is described as “a modular support brigade [that] . . . performs joint security and protection tasks.”¹⁰ MEBs do not normally deploy with their own subordinate units, but can provide command and control for MP and airspace management units as well as engineer, air defense, and various other specialties assigned to other brigades and divisions.¹¹

The MEB was also designed to incorporate Air Force liaison elements into its area security and control mission set, which could provide the joint platform necessary for assessing potential SAM launch sites and controlling patrols and observation posts to defeat this threat to joint air operations. Unfortunately, as previously indicated, JP 3–10 provides conflicting guidance with regard to component responsibilities for securing aerial approach and departure corridors for joint airfields, and although the MEB is an implied solution for securing the areas outside of joint

air fields, opportunities for disagreements in the definition of *critical assets* and accountability for defeating the SAM threat to air assets demand revised and joint guidance.

Fortunately, a model for resolving this disconnection between defending airfields and their approaches can be found under Seaport Facility Defense Considerations in JP 3–10. Outside of the land combat commander’s area of operations and in conjunction with the host nation, Navy and Coast Guard forces are tasked with securing the shore boundaries for joint seaport facilities as well as “waterside harbor approach[es]” during normal operations.¹² While it is intuitively obvious that JFMCC forces are tasked with providing security for their own sea or river approaches, the solution for securing shore approaches is instructive in resolving the apparent doctrinal seam with regard to aerial approaches to joint airfields.

In “high risk situations” where the shore boundary of the harbor facility of a seaport is not located within the commander’s area of operations, JP 3–10 suggests attaching a unit from another Service as a mobile security force for defense of the seaport under the tactical control of the Harbor Defense Commander (HDC). This approach to seaport facility defense should instruct efforts to revise the Air Base Defense Considerations section in JP 3–10. During lower threat operations at joint airfields, the SAA should be tasked with providing organic JFACC security forces to mitigate potential SAM threats to approach and departure corridors off the airfield in conjunction with the host nation, similar to the HDC commitment of JFMCC security forces to shore approaches. During higher threat operations, JP 3–10 should suggest the provision of a detachment of JFLCC forces in support of the JFACC and under the tactical control of the SAA to provide enhanced security for the air assets landing at and departing from joint airfields while preserving the command and control responsibilities outlined in chapter II of JP 3–10.

The United States enjoys airpower advantages that are the envy of friend and foe alike. As adversaries continue the search for inexpensive, low-tech counters to U.S. military superiority, joint doctrine must evolve to ensure that low-density/high-demand assets are afforded the security commensurate with their importance to national security. Standardizing a

defensive concept of JFLCC responsibilities for approaches to JFACC airports, as well as JFMCC seaports, during high-risk operations would provide the clear joint guidance needed to mitigate the doctrinal seam presented by SAM threats to joint airfield approach and departure corridors. This approach would also provide further assurance for the continued availability of strategic airpower capabilities across theaters worldwide while providing an additional layer of insurance and security for the continued technological superiority of U.S. airpower in a constrained budgetary environment. **JFQ**

NOTES

¹ Joint Publication (JP) 3–10, *Joint Security Operations in Theater* (Washington, DC: The Joint Staff, February 3, 2010), available at <www.dtic.mil/doctrine/new_pubs/jp3_10.pdf>.

² Government Accountability Office (GAO), *Nonproliferation: Further Improvements Needed in U.S. Efforts to Counter Threats from Man-Portable Air Defense Systems*, 04–519 (Washington, DC: GAO, June 3, 2004).

³ Christopher Bolkcom, Andrew Feickert, and Bartholomew Elias, *Homeland Security: Protecting Airlines from Terrorist Missiles*, RL31741 (Washington, DC: Congressional Research Service, 2006).

⁴ Ibid.

⁵ *The National Military Strategy of the United States of America 2011: Redefining America’s Military Leadership* (Washington, DC: Chairman of the Joint Chiefs of Staff, 2011), available at <www.jcs.mil/content/files/2011-02/020811084800_2011_NMS_-08_FEB_2011.pdf>.

⁶ Ibid.

⁷ Field Manual (FM) 3–39, *Military Police Operations* (Washington, DC: Headquarters Department of the Army, February 16, 2010).

⁸ Air Force Tactics, Techniques, and Procedures 3–10.2, *Integrated Base Defense Command and Control* (Washington, DC: Headquarters Department of the Air Force, March 1, 2008).

⁹ JP 3–17, *Air Mobility Operations* (Washington, DC: The Joint Staff, October 2, 2009), available at <www.dtic.mil/doctrine/new_pubs/jp3_17.pdf>.

¹⁰ JP 3–10.

¹¹ FM 3–90.31, *Maneuver Enhancement Brigade Operations* (Washington, DC: Headquarters Department of the Army, February 26, 2009).

¹² JP 3–10.

Airman scans street sector from outer wall of Bagram Airfield, Afghanistan, after insurgent attack



U.S. Air Force (Horace Murray)

Joint Terminology At the Heart of Doctrine

By GEORGE H. HOCK, JR.

Recently, the largest component of the joint force, the U.S. Army, confirmed its new chief of staff, General Martin Dempsey. General Dempsey, speaking 2 days after his nomination, outlined issues that he thinks are important for the Army going forward—one of which is “getting the words right.” Dempsey, who previously commanded U.S. Army Training and Doctrine Command, emphasized that the Service is making changes to its core doctrine, and for that reason he is serious about getting the definitions right. Words matter. He went on to stress why doctrinal language is so important by quoting Mark Twain: “The difference between the almost-right word and the right word is really a large matter—it’s the difference between the lightning bug and the lightning.” Current joint terminology efforts are consistent with its Service counterparts’ commitment to ensuring concise, clear language.

It is Department of Defense (DOD) policy to improve communications and mutual understanding within the department, among other Federal agencies, and between the United States and its international partners through standardization of military and associated terminology. Joint Publication (JP) 1–02, *DOD Dictionary of Military and Associated Terms* and its associated database are the key documents within the joint doctrine discipline that support this policy. It is the primary terminology source when preparing correspondence, including policy, strategy, doctrine, and planning documents and applies to the Office of the Secretary of Defense (OSD), Services, Joint Staff, combatant commands, DOD agencies, and all other DOD components. As such, it is by far the most widely referenced document within the entire body of joint doctrine, receiving nearly

250,000 individual page views and 23,000 full document downloads per month.

Over 25 years after the Goldwater-Nichols Department of Defense Reorganization Act of 1986 mandated “jointness,” Service personnel still sometimes struggle to communicate with one another during joint operations. No doubt there has been marked improvement, but there is room for more. In 1989, OSD decided that joint terminology should be consolidated in one place and managed accordingly. The responsibility was transferred to the J7. The Secretary of Defense, in DOD Directive 5025.12, *Standardization of Military and Associated Terminology*, directed the use of JP 1–02 (originally called JCS Pub 1) throughout DOD to ensure standardization of military and associated terminology. The idea was not to capture the voluminous Service-specific technical terms but those of a broader nature that have significance in the planning and conduct of joint operations. Currently, there are ongoing initiatives to improve JP 1–02 which include appropriately standardizing and annotating source publications for all entries.

As early as 1993, source documents were identified and noted in JP 1–02 and the newly developed Joint Terminology Master Database (JTMD) in order to provide a contextual basis for proper understanding of each term. Additionally, a process was established for terms to be reviewed regularly as part of the normal revision cycle of the source document to ensure relevance. This methodology of sourcing terms in conjunction with the normal joint doctrine development process continues. Yet even with such a process, entries such as “white cap—a small wave breaking offshore as a result of the action of strong winds. See also wave” remain in JP 1–02. *White cap* and *wave* were defined in JP 1–02 almost exactly as they

are in the Concise Oxford English Dictionary, begging the question of their utility as entries.

In late 2005, however, the joint/Service terminologist’s working group embarked on the sourcing project guided by the mantra “precise terms used precisely” and nears completion today. The results of this multi-phase long-term effort is that from the high water mark of approximately 6,000 DOD and North Atlantic Treaty Organization terms in 2005 in JP 1–02, approximately 2,500 of them (without approved sources and those that are deemed unnecessary) have been removed. The fourth and final term sourcing coordination is in progress. There are still 1,250 terms without sources annotated in JP 1–02, but they have candidate sources identified for resolution during the current JP revision cycle. It should be noted that each removed term is kept if ever needed again, along with over 20,000 other entries in the JTMD archive. *Wave* is now more appropriately defined in a military context in JP 1–02, but *white cap* remains a target of our project.

The other joint terminology initiative in progress is standardizing entries by enforcing the brief “Definition Writing Guide” benchmarks. This guide is part of the recently updated Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 5705.01D, “Standardization of Military and Associated Terms,” which governs JP 1–02. Concise terminology is critical to military communication, and the CJCSI guidance makes a stark distinction between desired definitions and unwanted descriptions. A *definition* is a formal statement of the exact meaning of a term that enables it to be distinguished from any other. A *description*, in contrast, is a narrative containing informa-

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tion about the term that is not constrained in format or content. Only definitions are permitted in JP 1–02.

The primary focus of J7 guiding instruction and efforts is to ensure the quality and

relevance of entries in JP 1–02 for the user. The U.S. military is the most advanced, specialized, and complex joint force the world has ever seen, which makes a broad, overarching joint lexicon designed to cross-connect

operations that much more important. J7 is committed to furthering the mantra of precise terms used precisely and will continue to ensure joint terminology is maintained at the heart of doctrine. **JFQ**

JPs Under Revision

JP 1, *Doctrine for the Armed Forces of the United States*
 JP 1–0, *Personnel Support to Joint Operations*
 JP 1–04, *Legal Support to Military Operations*
 JP 1–06, *Financial Management Support in Joint Operations*
 JP 2–0, *Joint Intelligence*
 JP 2–01, *Joint and National Intelligence Support to Military Operations*
 JP 2–03, *Geospatial Intelligence Support to Joint Operations*
 JP 3–0, *Joint Operations*
 JP 3–00.1, *Strategic Communication*
 JP 3–01, *Countering Air and Missile Threats*
 JP 3–03, *Joint Interdiction*
 JP 3–04, *Joint Shipboard Helicopter Operations*
 JP 3–07, *Stability Operations*
 JP 3–07.3, *Peace Operations*
 JP 3–07.4, *Joint Counterdrug Operations*
 JP 3–08, *Interorganizational Coordination during Joint Operations*
 JP 3–12, *Cyberspace Operations*
 JP 3–13, *Information Operations*
 JP 3–13.1, *Electronic Warfare*
 JP 3–13.3, *Operations Security*
 JP 3–13.4, *Military Deception*
 JP 3–15, *Barriers, Obstacles, and Mine Warfare for Joint Operations*
 JP 3–15.1, *Counter–Improvised Explosive Device Operations*
 JP 3–16, *Multinational Operations*
 JP 3–27, *Homeland Defense*
 JP 3–28, *Civil Support*
 JP 3–32, *Command and Control for Joint Maritime Operations*

JP 3–33, *Joint Task Force Headquarters*
 JP 3–34, *Joint Engineer Operations*
 JP 3–35, *Deployment and Redeployment Operations*
 JP 3–40, *Combating Weapons of Mass Destruction*
 JP 3–41, *Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives Consequence Management*
 JP 3–50, *Personnel Recovery*
 JP 3–57, *Civil-Military Operations*
 JP 3–59, *Meteorological and Oceanographic Operations*
 JP 3–60, *Joint Targeting*
 JP 3–63, *Detainee Operations*
 JP 3–72, *Nuclear Operations*
 JP 4–0, *Joint Logistics*
 JP 4–01, *The Defense Transportation System*
 JP 4–01.2, *Sealift Support to Joint Operations*
 JP 4–01.5, *Joint Tactics, Techniques, and Procedures for Transportation Terminal Operations*
 JP 4–01.6, *Joint Logistics Over-the-Shore*
 JP 4–02, *Health Service Support*
 JP 4–06, *Mortuary Affairs in Joint Operations*
 JP 4–08, *Logistics in Support of Multinational Operations*
 JP 4–10, *Operational Contract Support*
 JP 5–0, *Joint Operation Planning*
 JP 6–01, *Joint Electromagnetic Spectrum Operations*

JPs Revised (within last 6 months)

JP 2–01.2, *Counterintelligence and Human Intelligence Support in Joint Operations*
 JP 3–05, *Special Operations*
 JP 3–68, *Noncombatant Evacuation Operations*
 JP 4–03, *Joint Bulk Petroleum and Water Doctrine*



Department of Defense – Department of State
AREAS OF RESPONSIBILITY



Every 2 years, the Chairman of the Joint Chiefs of Staff is required by law to review the missions, responsibilities, and geographical boundaries of each geographic combatant command in the U.S. military and recommend to the President, through the Secretary of Defense, any changes that may be necessary. The review process includes combatant commanders, Service chiefs, and Department of Defense (DOD) leadership.

DOD Unified Command Plan (UCP) 2011 is a key strategic document that established the missions, responsibilities, and geographic areas of responsibility (AORs) for commanders of combatant commands. DOD geographic commands' areas are encompassed within designated borders. President Barack Obama signed the document April 6, 2011.

Adjustments in the 2011 UCP make U.S. Northern Command responsible for advocating for Arctic capabilities; U.S. Africa Command's maritime boundary will include the Cape Verde zone; and U.S. Southern Command will include the maritime boundary of the South Sandwich Islands.

Functional Command Revisions

U.S. Strategic Command's responsibility for combating weapons of mass destruction and developing a Global Missile Defense Concept of Operations is expanded. U.S. Transportation Command is assigned responsibility for synchronizing planning of global distribution operations.

The mission of the State Department Regional Bureaus is to implement U.S. foreign policy, conduct diplomatic relations, and manage and promote U.S. interests in their respective regions. State Department Regional Bureau areas of responsibility include land areas within DOD AORs and overlap multiple DOD AORs (see color key).

Geographic and Functional Combatant Commands

There are six geographic combatant commands: U.S. Africa Command, U.S. Central Command, U.S. European Command, U.S. Southern Command, U.S. Pacific Command, and U.S. Northern Command. There are four functional combatant commands: U.S. Transportation Command, U.S. Strategic Command, U.S. Special Operations Command, and U.S. Joint Forces Command (to be disestablished by August 30, 2011).

Department of Defense Geographic Commands

- U.S. Northern Command (USNORTHCOM)
- U.S. Southern Command (USSOUTHCOM)
- U.S. European Command (USEUCOM)
- U.S. Africa Command (USAFRICOM)
- U.S. Central Command (USCENTCOM)
- U.S. Pacific Command (USPACOM)

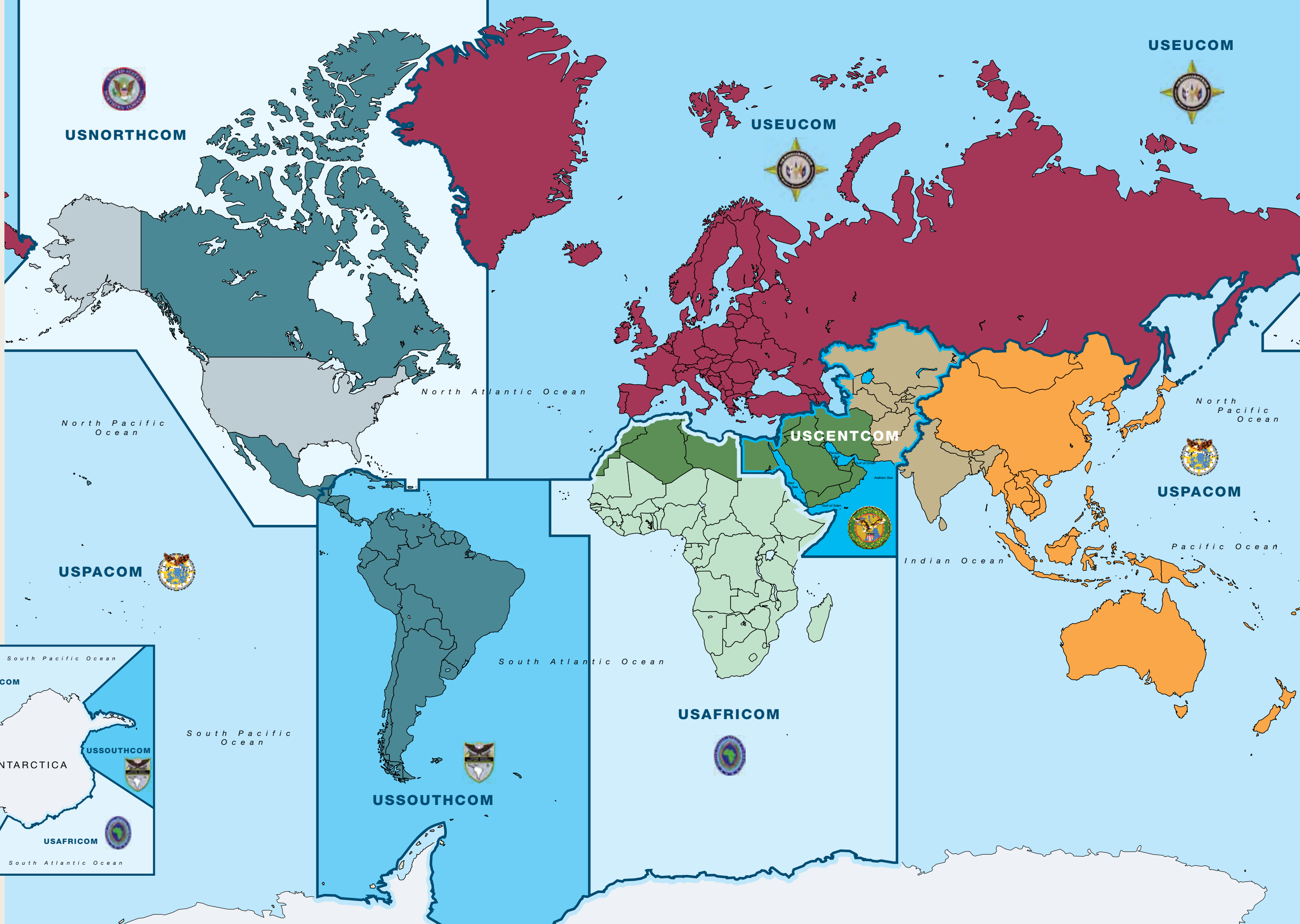
Department of State Regional Bureaus

- Bureau of Western Hemisphere Affairs
- Bureau of European and Eurasian Affairs
- Bureau of African Affairs
- Bureau of Near Eastern Affairs
- Bureau of South and Central Asian Affairs
- Bureau of East Asian and Pacific Affairs

JFQ

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JFQ Call for Entries *for the Academic Year 2011–2012*

Secretary of Defense National Security Essay Competition *and the* Chairman of the Joint Chiefs of Staff National Defense and Military Strategy Essay Competition



As a military or civilian defense professional and student, you probably have something to say about a U.S. national security topic familiar to you. Start **NOW** to explore ideas, map out research, and outline your argument before you are caught up in the school year.



Who's Eligible: You, the military or civilian student—including international students—of a U.S. senior war college, staff college, or advanced warfighting school, or Service research fellow.

What: Research and write an essay, with options to write a concise opinion piece (1,500 words max) or a documented research paper (5,000 words max). Must be original research or informed commentary, unclassified, and submitted via your college after an internal selection process. May relate to a course writing requirement. Not a school solution—but an innovative, imaginative approach to a national security-related issue of your choosing.

When: The deadline for colleges to submit entries to NDU Press is April 25, 2012. After an initial round of judging, final judging occurs May 15–16, 2012, by a panel of PME faculty judges who meet at National Defense University.

It is strongly recommended you begin your planning and research in fall 2011 in order to allow time for your school to evaluate and select nominations for the contests. To keep the competition manageable, the number of entries is capped for each school.

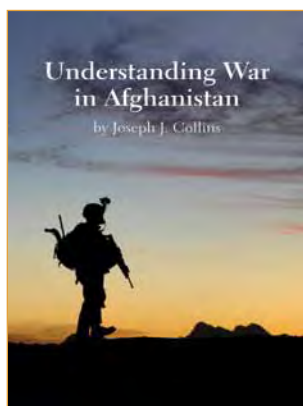
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For further information, contact your college's essay coordinator, or go to:

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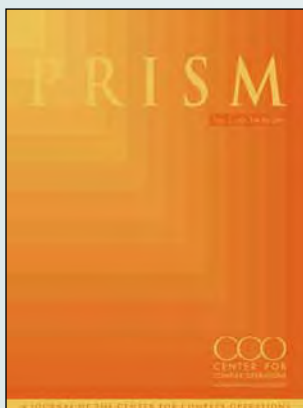


NEW from NDU Press

Understanding War in Afghanistan

by Joseph J. Collins

The author describes this concise book as an “intellectual primer on war in Afghanistan.” Joseph J. Collins is one of few people qualified to make such a claim. His career as a Soldier, policymaker, and academic has kept him involved for more than 30 years with the various wars in this central Asian country, from the Soviet occupation through current U.S. operations. The book attempts to provide military leaders, civil servants, diplomats, and students with the intellectual basis to prepare for further study of or assignment in Afghanistan. After examining the land, people, and culture, the book covers the history of the country, including the Soviet-Afghan War, the civil war, the advent of the Taliban, the war against the Taliban, and the U.S. effort from 2001 to the present. It also includes a chapter on the theory and practice of counterinsurgency, which Collins describes as essential to understanding the nature of the current conflict. He concludes with the potential choices and issues facing national leaders for the future, notably the necessity for the United States to redouble its efforts in building Afghan capacity so that the country can stand on its own two feet.



PRISM

A Journal of the Center for Complex Operations

PRISM 2, no. 3 (June 2011) takes on a variety of topics on complex operations, although several offerings focus on aspects of criminal activities. The Features section opens with Lieutenant General Robert Caslen and Major Bradley Loudon writing on forging a comprehensive approach to counterinsurgency. The next three articles deal with aspects of the criminal challenge for counterinsurgency and complex operations, and include Douglas Farah on terrorist-criminal pipelines and criminalized states, Colonel Robert Killebrew on criminal insurgency in the Americas, and Professor Bruce Baker on building law-enforcement capacity in Africa. The remaining Feature articles present Professor Stephen Krasner on state-building, the Honorable Franklin Kramer on irregular conflict, Dr. Max Manwaring on three cases of transnational criminal organizations, and Dr. James Carafano on interagency reform. Next, From the Field articles include, from Germany, Dr. James Derleth and Jason Alexander on stability operations; from Haiti, David Becker on gangs and “community counterinsurgency”; and from the Pacific, Dr. Andrew Leith on regional assistance to the Solomon Islands. The Lessons Learned article, by Dr. Stephen Mains and Dr. Gil Ad Ariely, discusses the management of operational knowledge. Finally, the issue concludes with an interview of General David Petraeus.

PRISM explores, promotes, and debates emerging thought and best practices as civilian capacity increases in order to address challenges in stability, reconstruction, security, counterinsurgency, and irregular warfare. Published by NDU Press for the Center for Complex Operations, *PRISM* welcomes articles on a broad range of complex operations issues, especially civil-military integration. Manuscript submissions should be between 2,500 and 6,000 words and sent via email to prism@ndu.edu.



JOINT FORCE QUARTERLY

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